



## Original Correspondence.

## VENTILATION OF COAL MINES.

SIR.—It is not a little amusing to see the efforts that are making to improve, or suggest something new upon this subject. Pipes! Pipes! have had a long reign, and the delusion at length took hold of Messrs. Lyell and Faraday, who examined the Haswell Colliery, after that fearful explosion on Sept. 28, 1844. They studied the subject with philosophical industry, and suggested that the end of each pipe should project up into the *dome of the roof*, and so convey the gas up the other end of the pipes into the upcast shaft. Now, it was thought remarkable that those gentlemen completely overlooked the fact that the natural course of the atmospheric air of the pit was to rush out through the pipes, to the exclusion of the gas, and having the effect that practical men are so anxious to avoid—the escape of the fresh air by means of imperfect stoppers or doors. I am old enough to remember the first splitting of air that was introduced by Mr. Buddle, and also the time when the dangerous collieries on the Tyne were worked by means of steel mills, up to the time when they were superseded by the invaluable invention of Sir H. Davy, in 1815, which lamp holds its ground up to the present time in its original simplicity.

Akin to many other abortive schemes was the steam-jet, of Gurney notoriety, upon which was founded many a romantic tale both in England and Scotland; and even the simplicity and effect of the very furnace is now sought to be overridden by some of the highly scientific of the Government Inspectors, fan-blasts and air-pumps being the order of the day; but more of this hereafter, as every day now seems big with colliery events, theoretic and practical, for by the Journal of Dec. 28 I see that Mr. M. Seymour (a native of Durham), the resident viewer at Mr. Barrow's Staveley Collieries, near Chesterfield, has succeeded in raising 1147½ tons of coal in 11½ hours, the slack contained not exceeding 2 per cent. of the whole. Mr. Seymour's prediction that he would be able to raise 1000 tons per day from the Seymour pit it seems has thus been more than verified. The discipline of the colliery too, is understood, is excellent, and both James Young, the overman, and Richard Hepplethwaite, who has the care of the ventilation, are entitled to much credit for the exemplary manner in which they fulfil their duties.

## SAFETY-LAMPS.

SIR.—During the last three years Mr. T. Y. Hall has been incessant on the perfection of his Nonpareil Safety-Lamp, during which he has superseded all Sir Humphry Davy's elementary experiments as to wires of different gauges—single gauges and double gauges, wicks of different forms, as well as oils and other apparatus for increasing the light. How far such variations are to be comprehended under a patent we would fain see, but Mr. Hall should apprise the public of the *relative cost, weight, and price of his lamp*, in competition with those already in use. The suggested chimney, too, is anything but new, being applied both to the "Musesel" and the "Clanny," as also the glass cylinder. The air-feeding is also antique—Stephenson's first lamps were fed through perforations in the body of the lamp. In fine, the lamp may excite curiosity, but until its complicity has passed a practical test, let no one feel too sanguine about it, as sane persons predict that it will share the fate of Mr. Hall's very ingenious provision for penetrating through after-damp by means of the "diving head-dress" and air-pipes adapted to his invention, but which scheme has never yet been ventured upon at any of the explosions. I see he has a notion of attaching the said apparatus occasionally. No doubt the lamp and its appendages will be fully reported on by the Northern Institute, now that it is fairly launched before the public, until which we shall wait with much anxiety.

A VIEWER.

## THE PROPOSED RAILWAY FROM YORK TO THE TEES.

SIR.—Your correspondent, "A Well-Wisher," I think misses much in his letter that this project deserves. The grievance of the coal monopoly by the North-Eastern Railway has proved such an infliction upon the whole of the public of the north-eastern district that the mere meeting of this new line has caused great interest. "A Well-Wisher" mentions the price of coals at Stokesley, and I may add that there exists an extraordinary agreement between Mr. W. Pepper and the board, giving this gentleman a total monopoly of the coal trade on that branch. Mr. W. Wooler, a shareholder in the North-Eastern, drew out this fact from the Chairman, remembering the excessive cooking, the job of the North of England purchase, and the many troubles this line of railway has been the victim of; the extraordinary, nay, unparalleled, liveliness of the country making the honest cost of a line very small indeed. The remarkable development of the district, and richness of the country, is so patent that there cannot be a doubt but that the new line would be a 10 per cent. one. The difficulty would be in obtaining an Act, but the very great unpopularity of the North-Eastern Railway, and the prejudice, as shown last session, Parliament entertains against the North-Eastern Company, would be most favourable to the new company.

A COAL CONSUMER.

Darlington, Jan. 2.

## THE GEOLOGICAL FORMATION OF THE EARTH—No. XIV.

SIR.—My views on the earth's laws in forming new stratifications and its mineral productions being brought to a close, I will now make a few observations on what I consider should be the duty of a nation the majority of whose inhabitants are supported, either directly or indirectly, by the proceeds of the metallic miners. I say *metallic* miners, as without them all other mining operations would fall to the ground, therefore the earnest support of the nation, as a whole, should be extended to the mining community throughout every district of the kingdom. Government should advance this branch of industry by establishing schools in suitable situations, based on sound laws and unmistakable principles, presided over by teachers whose appointment should depend altogether on the results of competitive examination. The pupils of the first leading class should be required to work six hours daily in some mine, proof being adduced that they had laboured underground, and the description of work performed; this class should first be taught the rudiments of underground work, and should be provided with suitable books on the subject, to be read at leisure. The pupils should be compelled to attend work and school daily, and, should any of them remove to another district, they should be provided with certificates, for introduction to their proper class in the school of that district. First prizes should be made to pupils of this class only, and the award according to merit; but, if the labour part has not been regularly performed, such pupil should be considered ineligible, and the prize conferred on the next in rank who had performed the labour part—it being an essential requisite to a good miner that he should be industrious and able to work, as well as being a scholar. A great evil with our national schools is that their pupils are more efficient in learning than work, and the nation cannot provide them all with situations. It must be remembered that a certain number are required to work, to keep up the prosperity of the country; a very small proportion only being required as foremen, overseers, and clerks, who, generally speaking, are not much disposed to work; therefore, we must not be provided too abundantly with a class which, I fear, our present system of teaching is showering upon us. The second class in mining schools should be on dressers, carpenters, smiths, office and other clerks; third class, engineers, smelters, chemists, and surveyors or diallers. Those of the underground class, after obtaining one or two prizes, should be admitted to other classes as they progressed. Mineralogy should be taught the smelter, who, after obtaining a first or second prize in it, should be instructed in chemistry, to enable him to become either smelter or assayer. No man should be appointed agent of a mine who had not passed the rudiments of underground work before he was 18 years of age, and who had the certificate of qualification from the school where he had passed. Certificates of qualification should be supplied to members of the other branches, showing their proficiency, and as a stimulus to energy, as well as a guarantee to parties by whom they may be hereafter engaged. Sir C. Lemon made a noble effort to establish such a school; but who were the pupils? It was clear from the first that it would fall to the ground. More recently a school has been started in Cornwall, in which I am glad to see the progress reported so soon after its inauguration; but I have not yet had an opportunity of analysing the pupils, who, I hope, are of the right class. I have already intimated this to R. W. Fox, the gentleman who awarded the late prizes, and no doubt with a good intention; but I fear a preference has been given to the school-taught over students of the book of nature, it being a query if half of those to whom prizes were awarded ever worked six months in a mine, and the remaining half, in all probability, had never been underground. Some old Practical will, at a future day, send me a list of the prize holders, showing how many are really working miners under 16 years of age. How many are captain's sons, and how many are the sons of mine merchants? The latter classes, generally, are not inclined to work, but, in a year or two hence will be found filling situations, to the detriment of mining, and to the exclusion of those who are toiling hard for their bread, and who, if opportunity offered, would some day become bright ornaments of the mining community. It is time working miners should look about them, and see if all is going right, or they will find, when too late, no chance has been left their sons to become agents, to be as active and intelligent as they may.

I have always found that men appointed to agencies who were never underground before pretend to shew the knowledge of myself. I may here hint that, as our mines are getting deep, adventurers will find, when too late, they have not got the right men in the right places. These appointments may be compared to the Government selection of teachers. How many of them were working men? Not half. Some of them, having been underground with myself, did not know the lode from the country, but they could easily a flat bed of black shale, and ask if such would not ultimately become a bed of coal. I have frequently been obliged to give expression to my feelings, on observing these men turn to their maps to ascertain what such layers were, and which of them might be. They are not aware that metal-bearing layers are below the coal measures, neither are they, generally, aware of what metal-bearing layers are composed, or even their guide to them. The sending abroad of such persons in search of mineral deposits can only prove a failure. The error of such appointments may be further illustrated by reference to a comparison made by one of them when underground with myself; it was that a black tin cap, underlying above the angle of 50°, was the finest copper

lode he had ever seen, and would prove a second Devon Consols before it was 40 fms. deep. Such unqualified appointments are characteristic of the Government, both at home and abroad.

NICHOLAS ENNOR.

## THE ORIGINAL OPHIR—(Continued.)

SIR.—And the navy, also, of Hiram that brought gold from Ophir brought in from Ophir great plenty of *almug trees and precious stones*. And the king made of the almug trees pillars for the house of the Lord and for the king's house, *harps also, and psalteries for singers*. There came no such *almug trees, nor were seen unto this day*. Now, where did these almug trees grow, if they were not procured from *Austral Asia* during *Hiram's three years' voyage*? For is not the original word *AL'MUG* synonymous with its transposition, *AL'GVM*? and is not the massive timber growing about the Caspian Gulf nearly *AL'GUM* trees? It matters not whether called white, red, or blue gum, or by any hard Latin classification, is it not a fact that the colonial name *gum tree* is the same as what is sometimes styled *Swan River mahogany*? Then, doth not the letters *gum'y* and *mug'y* designate certain *mucilaginous* exuding from lignaceous produce, and are not some of those exudations very fragrant, as well as useful adjuncts in polishing? Besides, where could Solomon procure more suitable wood for these pillars and instruments the text describes that what to this day grows abundantly in New Holland? Is not its texture, colour, and density somewhat 'twixt African teak and Spanish mahogany, with grain so *fine* and *hard* as to enable it to be carved and polished to the greatest degree of perfection and durability, not only fit to be applied to raised edifices, but for any other ornamental or useful purpose where stability is required, or where its natural colour is to be exposed for ages? Then, again, if any comprehend the *Jachin* and *Bosch* stone to enter the sanctum sanctorum of the Brahmans, they will find the two main pillars columns of Solomon's temple were each made of brass, as many feet in height as there are weeks and its parts in a solar year, while their mean circumference coincided in *cubits* to the number of lunar months in a year, the internal hollow of each pillar being opened to expose a circuit in *inches* equal to the number of weeks in a year, to answer for archives to the sacred edifices, &c. In the Brahmin code of wisdom, it shows the right or east side pedestal was made to represent a couple of *brahma* constructors, constricting themselves reverse ways round a plain tapered column; hence the English designation should not be *Boaz*, that being merely a scriptural name for a rich good-natured man; but it should have been written *noas*, because it was the great *no-a*, or *Pythian sea-serpent*, that gave rise to the famous Delphic oracles, whose response the wisdom of man have never since equalled; hence *boas*-serpents became the mystical emblems of *wise-dom*. By similar transmogrification of senses and tenses, the wands of *Mercy*, *Moses*, &c., were represented by a *deuce* of serpents intertwined, consequently, from *ca'*, meaning *carcase*, and *deuce*, two, the compound term *ca'dence* signified a brace of bodies embraced as emblematical of wisdom, and, from a serpent being alluded to as the first evil tempter, the word *deuce* and devil eventually got confounded as one meaning. The left or west pedestal of Solomon's porch was first denominated *ion*, to signify *strength*, since which the above three letters have given rise to such words as *ion-ic*, *ionic*, *JOHN*, *JACK*, *JACHIN*, &c. By the same rule, it shows the characters corresponding with the English letters *vn-ion*, to absolutely express *one John*, *a-jack* (pendant), *Ajax* (a powerful warrior), *jack* (fish), a lifting *jack*, and such terms as denote *strength*. In any original model of the said temple may be seen on the plinth of the right or east pedestal, letters signifying *so-o mon*, whose chapter was graced by a large celestial sphere, duly graved and radiantly lighted, to represent the effulgent *sun*, or *sun of the most EYB GOD*; and the name *so-o mon* itself signifies "a wise man of God." The west or left column displayed the letters *HE'RAM*, to denote *the navy of Hiram* or *Hiram* sailed, showing not only the position of modern Australis, but where Solomon erected that very dedication he said should stand firm for ever; whereas, from Solomon himself in his old age abusing that divine wisdom his Creator blessed him with in his youth, not only the site where his temple was reared, but the whereabouts he abstracted so much gold from became unknown, until PROVIDENCE deemed it meet such places should be again truly shown through those who know how to knock for the door of truth to be opened unto them. Through etymologists not perfectly comprehending the true nature of letters, they know not when they meet any primitive root; take, for instance, the last sentence in *H'RAM*: it was originally the letters to signify strength, courage, power, or the like, whether produced by any butting *ram*, buttering *ram*, hydraulic *ram*, or from such powerful beings as *Aram*, *Abra'm*, *Ram-is*, *Semi-Ramis*, &c. It was from the transposition of *RAM*, to signify strength, that the *ARM* of man was so *spur*, and also *WAR* to denote the god of war, which last term was made by capsizing the letter *t* to *w*; nevertheless, war is a sound to such words as *ion-ion* of *JACKS*, till wisdom dictates the way.

Jan. 9.

G. F. GOOLE.

P.S.—In my last letter it is stated six instead of *TEN* years, as per copies, showing I was the first person that pointed out the actual areas where gold abounded in Victoria. "GOLD SEEKERS OF VICTORIA."—Having no individual interest with your success or failure in the gold fever, yet I cannot help throwing my mite towards such persevering and legitimate industry, therefore I hereby give my humble opinion, deduced from scientific and practical observations, that gold and other precious metals, I am persuaded, abound in Victoria; consequently, I advise explorers to operate between the *Loddon*, *Avoca*, and *Granite* Ranges, as their geographical position, geological formation, *meridian* parallels, with other indications, denote the latitude and longitude in which the auriferous deposit, ought, from analogy, to abound. Respecting the *Plenty*, I do not anticipate any gold ever was, or will be, found in it on this side of Mount Disappointment. Silver, copper, and iron are in abundance; in short, beyond Heidelberg, every indication of copper is apparent to any geologist, and, if parties would consider that these metals are often more profitable than gold, then why not profit by them?—G. F. GOOLE: Royal Hotel, Melbourne, June 12, 1861."

## GOVERNMENT CREEPERS.

SIR.—Wishing to observe what the British Government were doing in preparing for the *Trent* insult, I put on my invisible cape, and shoes of swiftness, merely to visit the dockyards and gun factories of England, and am very sorry to say I seldom noticed so much useless labour and wasteful expenditure as was taking place in the Enfield Rifle Factory, by the employment of workmen by night, at double wages, in attempting to make a few thousand of useless things called *creepers*, to enable soldiers to creep over the ice-bound surfaces of an enemy's country,—articles very desirable; therefore only suitable feet appendages should be made, at reasonable prices, and not to saddle the public with the cost of manufacturing things not the least adapted to the purpose demanded. For if it is expected British soldiers will ever be sent to meet foes on icy ground, such men ought to be provided with really serviceable items. But if it is thought there will be no clash of arms with North Americans, why attempt *expeditiously* the making of things of no earthly or *icy* use, as I feel convinced the first day's marching of any heavy-armed infantry, shod with the *creeper* in question, will cripple more men than any other enemy can do; for, instead of constructing them from light steel ribbon, about 2 in. wide, with three or four stout *conical* steel pegs, secured in the bottom in such a way as to enable frozen matter, when accumulated, to leave freely by any sudden jerk, or what not, the present absurd shapes are being merely cut out of soft sheet-iron, in such a way as to allow the four corners being turned downwards, to prevent the wearers from slipping; and yet the first day's attempt of heavy-accoutred men, over any hard ground, will not only force the projecting angles out of perpendicularity, but will cause any icy matter between them to get more firmly pressed, till the soles of the *souls* will be bodily lifted up on glassy stilts, past the art of walkers to quickly liberate, as the more the movers kick to do so, the more will the soft iron points bend or break, and when any corner gives way, so will the walker get crippled or thrown sideways. In short, the idea of inventing such unmechanical appliances could only have been suggested by some keen Yankee, on purpose to create dismay, should they ever attempt to creep (for to walk on them long will be impossible) on any frozen region, like the hard ice lakes in North America. Surely before such extravagant items were ordered by thousands, a few might have been previously tried by a file of heavy-accoutred men, for a few hours, on some hard surface, so that their fitness might be seen. In fact, it ought to be done at once, before they are attempted to be shipped to places where proper ice-holders are likely to be required.—*Maentourig*, Jan. 10.

G. F. GOOLE.

## SOUTH FRANCES—BOUNDARY QUESTION.

SIR.—On making enquiry as to what transpired at the meeting of South Frances' advocates, held on Monday, respecting the Boundary Question, I was informed the Chairman addressed the meeting to the following effect:—"No doubt, gentlemen, you are quite satisfied to leave it in the hands of the committee; and I think you will agree with me that it will be desirable to avoid any discussion upon it on the present occasion, for I assure you that, however the business may be finally settled, nothing decisive will be done without our calling you together in special meeting, to have your concurrence. In the meantime I will be very brief with you. Our present position is just this:—We have succeeded, after much difficulty, in getting into the House of Lords, and as soon as they meet, our case will be proceeded with. Our agent, Captain Charles Thomas, will shortly, in pursuance of an Order we have obtained, proceed to assess damages. On the other hand, our opponents have abandoned their intention of going to the House of Lords, which, of course, will show you how utterly hopeless their case is, and also that both the law and facts are on our side." If this be a fair specimen of the spirit which managed our affairs, I begin to despair of the success of our cause. Why were our solicitors absent? The solicitors of the West Basset adventurers invariably attend the general meetings, and explain, so far as advisable, the position of the dispute.

Cassio, Jan. 9.

OUT-ADVENTURER.

PELYN WOOD, AND OTHER MINES—CAPT. SEYMOUR.

SIR.—In last week's Journal, Captain Seymour has thought proper to again give the public his views of many mines. He begins his letter by saying Pelyn Wood is an unfortunate mine. Now, I do not wish to create any unpleasant feeling, nor do I make a single remark to any way depreciate the value of this or any other mine I may name, although I do not agree with many of his remarks as a shareholder. In the first place, it is not an unfortunate mine, but a misrepresented and badly-managed one. About 60 fathoms sunk in shafts, and about 100 fathoms driving in ends, a water-wheel erected, cost (say) 700/-, a small floor made, and a small office built, and other small necessary buildings, for the large amount sunk of 10,000/-, to 11,000/-, a sum quite sufficient to put the mine, with water-power, 100 fathoms deep. What has become of the money? Capt. Seymour now asks the shareholders to buy the set, and give him 2000/-, to open up a good and lasting mine. I, for one, should like to know how, and in what part of the mine he proposes to lay this 2000/- out, after which I shall be most happy to give my co-partners my advice also through the columns of the Journal. Respecting Wheal Sicily and Wheal Jane, Capt. Seymour tells us he prognosticated—I ask him, what? I am aware he was the manager of the latter mine, and if he knew of a course of lead being there, for the benefit of his employers he should have taken it away. I presume that the present company drove the adit but a short distance before cutting the lead. Does Capt. Seymour think that these two mines will turn out profitable for lead ore to any but the promoters? I have my doubts. Of the copper lodes I have a better opinion, and shall in due course, if required, have no objection to give my reasons both ways. I think any mining captain of experience who would advise Wheal Catherine to put to work, unless there is another lode much better than the one last wrought on, must have some other motive besides bringing out a good mine; perhaps a large premium, as such seems now the order of the day. That lode, I fearlessly say, was neither regular nor well defined, with no indication of an improvement in depth. Capt. Seymour from here jumps, a distance of 36 miles, to Camborne, and, no doubt, some, if not all, the mines he names are worth another trial; but I would strongly persuade all intending speculators to remember first Pelyn Wood, also to have the mine they intend to speculate in carefully inspected by a disinterested captain, and if found worthy of a trial so be it. Then allow the promoters fair expenses for time and labour: why should they pay beyond? There are plenty of mining sets equal to those to be had in the way I name. I am a well-wisher to mining, and have been 20 years promoting it; there is no investment so good, if proper precaution be taken, but the extortions premiums in many instances I could name will, I fear, bring upon all a cloudy day.

A SHAREHOLDER.

Jan. 9.

EAST CARN BREA, AND MR. WATSON'S REVIEW.

WHO IS RIGHT?

SIR.—A Bedruth correspondent a few weeks ago told us, through your valuable columns, the reserves in East Carn Brea were worth 60,000/. Mr. Watson, in his Annual Review, which I have just received, says the reserves are "estimated at 18,000/- to 20,000/." I bought my shares upon the former estimate. Who is right? Enquiry leads me to believe Mr. Watson is nearest the mark, and I hope the manager is not using the same magnifying-glass as he did in the North Basset Mine.

X.

Bath, Jan. 9.

J. TAYLOR, purser of Wheal Ludcott.

## EAST CARADON MINE.

SIR.—In reply to the letter in last week's Journal, emanating from Mr. Seccombe, discrediting my report of December 26, I beg to state that I considered 20/- per fathom to be a fair and full value for the new lode. I inspected the mine again yesterday, and I still adhere to my former opinion, and am fully satisfied that for 8 ft. driven it has not been undervalued by me, as any practical and disinterested agent may see from the backs of the ledgers. A gentleman in the North of England has written me, making enquiries respecting him, to whom this person introduced himself as a very fortunate mining speculator, a director in Phoenix Mines, a large shareholder in Marke Valley and Wheal Ludcott; and from his plausible representations this gentleman instructed him to transact some business for him. As no such person is known in the neighbourhood, and whose name is not, nor ever has, been in either of the above mines, it is evident an attempt to swindle, and I think I shall best serve the interests of speculators at a distance by giving it publicity in the columns of your widely-circulated paper; and should it prevent anyone

## Meetings of Mining Companies.

## EAST CARADON MINING COMPANY.

A meeting of shareholders was held at the White Hart, Salisbury, on Wednesday, Mr. FAWCETT in the chair, in the absence of Mr. Child.

The notice convening the meeting having been read,

The CHAIRMAN stated that it was with pleasure he met the East Caradon shareholders, for his duties were again almost entirely of a congratulatory nature, the mine during the quarter having improved in a greater ratio than formerly. He regretted the absence of Capt. Seccombe, who was detained from sickness, and who only abandoned the idea of being present at the last moment, when he found himself unable to undergo the journey. His absence was to be regretted by all the shareholders, for it was felt he composed an integral part of the company, and he could have described all the points of interest with such clearness. Capt. Seccombe had sent forward his nephew, and the clerk of the mine, Mr. Thorne, who would be happy to answer any questions. The Chairman then stated that the 50 east was worth 100/- per fathom, and for 120 fathoms in length had been a continuous course of ore, a thing unparalleled in Cornwall. Recently the lode had slightly altered its course, which would give the present company a further run of about 10 fms. in their grant. The 60 fm. level, 45 fms. behind the 50 fathoms level, is worth 50/- per fm.; in the level directly above it was only worth 20/-, proving that the lode improves in depth. The shaft is now down to the 70, and preparations are being made to drive out a cross-cut to the lode. A rise in back of the 60 is worth 80/- per fm. Fawcett's lode has improved to 90/- per fathom, and the new lode continues to be worth 30/- per fathom. Five or six lodes remained yet to be cut, all productive in South Caradon, and he must congratulate the shareholders on the possession of the richest mine in Cornwall. The drop in the standard had made a difference to the company in the quarter of several hundred pounds; nevertheless, looking to the great increase in the reserves of the mine, the directors recommended a dividend of 15s. per share.

Mr. HAWKE asked how far the eastern end was from the boundary, as sinister reports had been circulated to the effect that the present end was within 10 fms., which if uncontradicted was calculated to injure the property? —Mr. THORNE, in reply, stated that from 65 to 70 fms. remained to be driven.

The CHAIRMAN called the attention of the meeting to a report that appeared in the *Mining Journal*, signed Capt. Rich, which in several material points was incorrect, and stated that for the protection of the shareholders they should deem it prudent not to allow that gentleman to inspect the mine.

Mr. THORNE was requested by Captain Seccombe to call attention to an advertisement that had on several occasions appeared in the *Mining Journal*, in which the price paid for driving ground was incorrectly stated, and was calculated to mislead.

Mr. BATTERS said the mine could well afford to treat the matter with contempt, for it had beaten its enemies, and astonished its friends.

Mr. F. LANE proposed the passing of the accounts, and Mr. RISTEBRIDGE a 15s. dividend.

The CHAIRMAN proposed a vote of thanks to Capt. Seccombe, whose absence and its cause all present deeply regretted.

Mr. RISTEBRIDGE proposed, and Mr. GEACH (of the firm of Webb and Geach) supported, a vote of thanks to the Chairman.

The following report of the agent was read:—

*Jas. 6.—Williams' shaftmen are engaged in sinking below the 70 fm. level, for fork, trip-plat, &c., which will be completed in about a fortnight, after which we shall commence cutting plat, preparatory to driving south at this level, towards the counter and other lodes.—Fawcett's Lode: The drivage of the 60 west is for the present suspended. In driving east at this level the lode is improving, and is now worth 20/- per fathom.—Canter Lode: The 50 east since the last meeting has opened up a splendid piece of ore, worth from 90/- to 100/- per fm. The men employed in the 60 west are for the present engaged in putting up a rise towards the 50; the lode in the back is worth 80/- per fm. for the length of the rise, and in the level west 10/- per fm. The 60 east on this lode, is worth 50/- per fm.; this end is about 45 fathoms behind the 50.—New Lode: About a fortnight since we intersected in the 60 south cross-cut a new lode, 20 fm. wide, underlying north, worth about 30/- per fm. We have commenced driving east on its course, where it continues of the same size and value. This lode is 10 fms. south of the counter. The drivage of the 50 cross-cut south has been resumed, to intersect the lode at this level. In the 50 cross-cut north the ground is hard, being much of the same character as for some time past. The air-shaft has been communicated to the rise in back of the 20 by a borer-hole; the men are now engaged in sinking below this level.—Seccombe's Shaft: We have had in consequence of heavy ground and much water in this shaft a run, which has retarded our progress. We are getting it well secured, and hope soon to resume the sinking below the adit. The recent discovery of the new lode, and the continued good appearances of the counter and other lodes, have added very considerably to the reserves, and give me great satisfaction and confidence in good and continuous dividends from this mine.—JAMES SECCOMBE.*

## MARKE VALLEY MINING COMPANY.

A meeting of shareholders in this company was held at the White Hart, Salisbury, on Wednesday, Mr. FAWCETT in the chair.

The following report of the captain was read:—

*Jas. 6.—Saram Lode: We have been able to fork the water in the 100, and resume the cross-cut in this level; so far as cut into, it produces saving work for copper ore. We have from 3 to 4 fathoms further to drive to reach the north or main part of this lode, which was productive in the levels over. Our progress here is slow, in consequence of the great stream of water issuing from the end.—Rose Down Lode: The 90 west is producing  $\frac{1}{2}$  ton of ore per fathom. We are cross-cutting north in this level from Marke's lode, about 5 fathoms in advance of this end, to prove whether there is any more lode standing in that direction. The winze sinking on this lode, below the 80, is worth 3 tons of ore per fathom.—Marke's Lode: The 90 west is yielding 1 ton of ore; the ground is becoming easier for progress. In driving west, in the midway, the lode is for the present unproductive; we have communicated this level east to the rise.—Fisher's Lode: The 80 west is yielding 1 ton of ore per fathom. In the same level east 2 tons per fathom. The rise in the back of this level is producing 2½ tons per fathom. The midway, driving west, is worth 1 ton per fathom. The different stokes continue much the same as for some time past. In the 80 cross-cut south we have taken up a drove south on the cross-course, the ground in which is favourable; in this drove we have intersected two lodes, each about 2 feet wide. We purpose to prove these further west by a cross-cut from our ore ground. Salisbury shaftmen have nearly completed the bob-pit in the 70, and as soon as possible they will again resume the sinking towards the 100. In cutting the pit near the junction we have intersected some branches, which have produced about 2 tons of good ore; we intend opening on them deeper in the granite. I am pleased to inform you that, on the whole, we are looking as well as at any former period.—JAMES SECCOMBE.*

The CHAIRMAN stated that from the flourishing condition of their finances, and, best of all, the substantial position the mine had attained, they had, after mature deliberation, come to the determination to recommend a 6s. dividend, and to take rather over 200/- from them, and add it to the already large balance at the bank; after paying the dividend a balance would remain to their credit of 2890/- 15s. 9d., and the directors were of opinion that they had every prospect of keeping up the dividends. The mine had generally improved in position during the quarter, their reserves had been largely added to, and there were several points of great interest to come off shortly that were likely to enhance the value of their already valuable property. Thus, should a productive lode be found in the 100, under where so much ore was taken away in the 60, a completely new mine would be opened up in the eastern ground, from where no returns have been made for the last six or seven years. In the 80 cross-cut south, in a cross-course two new lodes have been found, of great promise, and nothing has ever been seen of them away from the influence of the cross-course; these lodes can be seen in a fine channel of ground from the same level a great distance to the west, other lodes remain to be cut, and independent of all these the ends are productive, and the shareholders are possessed of a really good and lasting mine, and he trusted to have the pleasure of meeting for many years to come his old friends, and receiving increased dividends. All regretted the absence of Captain Seccombe.—Mr. WARBURTON proposed the passing of the accounts.

Mr. G. LAVINGTON proposed, and Mr. WELLS seconded, the proposition for a dividend of 6s. per share, which was unanimously adopted.

Mr. BATTERS proposed a vote of thanks to the Chairman for his services in the chair on that occasion, and for his services to the company, extending over a period of nearly a quarter of a century.—Mr. WELLS seconded the proposition, and stated he had been a shareholder for about 22 years.—The vote was carried by acclamation.

## WEST ROSE DOWN MINING COMPANY.

A meeting of shareholders, held at the White Hart Inn, Salisbury, on Jan. 8 (Mr. FAWCETT in the chair), the accounts showed a debit balance of 14/- 0s. 9d. A call of 1/- per share was made. The following report, by Captain James Seccombe, was read to the meeting:—

*Jas. 6.—In driving the adit level west on the gossan lode we have made good progress, and have succeeded by this drive in draining the engine-shaft, so that we shall be able to sink to this level without the aid of the engine. The shaftmen are progressing satisfactorily in sinking the lode, which is in the shaft, being large, and of a promising character. I expect that in about three weeks from this time the shaft will be completed to this depth, rods fixed, and pitwork for house water-lift. The engine is put in and ready for working, but its services will not be required until the above object is accomplished; we shall then commence sinking below this level. In driving the adit east the ground is rather hard; we hope in about 10 fathoms further driving to intersect Rose Down lode in this direction. We have not as yet opened on the lode named in my last report.—JAMES SECCOMBE.*

## WHEAL CREBOR MINING COMPANY.

The quarterly meeting of shareholders was held at the company's offices, on Thursday, Mr. J. Y. WATSON, F.G.S., in the chair.

A statement of accounts, showing a cash balance of 101/- against the company, and liabilities over assets to December 31 of 371/- 6s. 4d., was passed, and a call of 1s. 6d. per share, made payable on the 25th inst. The agent's report was then read, as follows:—

*Jas. 8.—Since the last general meeting, held on Oct. 4 last, the 60 west, on south lode, has been driven 6 fms. 1 ft. 6 in., being 23 fms. from shaft, and for the whole distance the lode has been unproductive. The cross-course has been intersected, and is letting out much water. A cross-cut north on the eastern side of the cross-course has been driven 5 fms. 3 ft. It reaches the counter and main lodes, and from the bearing of the same (where seen) there must be from 2 to 5 fms. more to drive to intersect the counter lode, and from 5 to 7 fms. the main lode; when those lodes are cut I fully expect satisfactory results, as mentioned more particularly in my report for the last general meeting. In the 60 east, 11 fms. from shaft, a cross-cut south about 5 fms. behind the end, to which the lodes intersected; the first is about 15 inches wide, quartz and capel, with spots of mica and copper ore intermixed, the other is about 8 inches wide, much of the same description, carrying a little flock on the south wall. This level, on the south lode, has been driven 7 fms. 3 ft. 6 in., being now 33 fms. 3 ft. 6 in. east of shaft; the south lode for the last 13 fms. being in a disordered state has been unproductive, and is at present suspended. We have commenced a cross-cut south about 5 fms. behind the end, to prove the lodes meet with the before-mentioned cross-cut; about 7 ft. have been driven, and I cannot say the distance we shall have to drive, as there has not been enough driven on its course to prove the bearing, but I anticipate there will be from 7 to 10 fms. The 48 west has been driven 7 fms., and the cross-course intersected, which has let out much water; it is now almost dry, which proves that the old workings are drained to this level. I am still of opinion that this lode is not driven on the same lode as that from which the former parties raised such large quantities of ore. We have cleared out a sin in the bottom of the 34 in the old workings, where we found the lode is split on the south part of which we are now sinking a winze; the lode is 2 ft. wide, yielding saving work, and is almost perpendicular; the north part is about 18 in. wide, containing stones of ore, underlying about 3 ft. per fm., with branches in the horse, and both parts continue the same underlie I think the 48 is driven on a branch between those two lodes; however, this will soon be proved, as I have set four men to sink a winze on the south part,*

*at 5f. 10s. per fm., 2 fms. stent, and from present appearance this will more than pay itself. We have two tribute pitches working; one in bottom of the 48 east, by three men, at 10s. in 1/, and the men getting good wages; the other in back of the 48 to two men, at 12s. 4d. in 1/; although this piece of ground is rather poor in sight at present, I think it will soon improve. We are still costeanning for the Georgia lode, but in consequence of the rock being so steep our progress is slow. We sampled on Tuesday, Dec. 31, a parcel of copper ore, computed 85 tons. We have commenced sinking Cock's shaft below the 60, and set it nine men, to go 12 fms. deep, for 240/- I am still in hopes we shall meet with something good ere long, and as there are several important points to come off I look forward to the result with some degree of interest, and hope by the next general meeting to be in a position to report more favourably. All our machinery is in good working order.—JOHN GIFFORD.*

The CHAIRMAN stated, in reference to the accounts, that every debt and liability of the company had been charged to December 31, and the result was a statement of liabilities over assets of 977/- 6s. 4d. only, and he questioned if any young mine in Cornwall or Devon could show such a satisfactory state of affairs. When the mine was started, they had two objects in view, which objects they had been steadily pursuing, and were now, he hoped, on the eve of meeting with the reward they merited. The first object was to get Cock's shaft down to the run of the ore ground; and the second, to extend levels from the shaft to the head workings, drain them, and set pitches. The shaft was now down to the 60, a good course of ore gone down in the bottom of the level, and the pitches turning out nearly 20 tons per month, which would meet nearly half the costs of the mine—the costs, owing to the water-power, being little more than 120/- a month. The old workings had been drained to the 48, and as pitches would be set there he hoped the returns would increase. He (the Chairman) would only add that Mr. John Hitchins had been requested by him, when on a tour of inspection in the mining districts, to inspect Crebor, which he had done, and his report was of a very favourable character—in deed, Mr. Hitchins had assured him that he had not seen a better speculation in the country, which was very gratifying to him, holding nearly one-sixth of the mine, and he had little doubt but those who had held on their shares would soon meet their reward.

Mr. HITCHINS said he had a very high opinion of the mine, and looking at its position, and the cheap manner in which it was worked, he did say he had seen nothing like it, and as there was a good course of ore gone down in the bottom of the 60 he believed the lode would be in the shaft before it was down to the 70.

A vote of thanks to the Chairman terminated the proceedings.

## COOK'S KITCHEN MINING COMPANY.

At a meeting of adventurers, held on the mine, on Tuesday, the following statement of accounts was presented:—

|  |                     |
|--|---------------------|
| Black tin sold—Sept. 28, 12t. 15s. 0q. 19lbs., at 70/-       | £893 1 6            |
| Oct. 18, 11 2 19 at 71/-                                     | 849 15 5            |
| Nov. 8, 9 14 1 19 at 71/-                                    | 692 12 3            |
| " 27, 11 1 1 19 at 71/-                                      | 788 11 6            |
| Dec. 11, 18 18 1 15 at 71/-                                  | 991 14 6            |
| " 24, 14 5 3 15 at 69/- 7s. 6d.                              | 991 13 0            |
| Jan. 7, 16 12 2 14 at 70/-                                   | 1164 3 9            |
|  |                     |
| 90t. 6c. 1q. 20lbs.  | £6371 15 11         |
| Less dues (1-24th)   | 265 9 9 = £6106 6 2 |
| Extra carriage of tin  | 6 16 6              |
| Copper sold, Oct. 31, 40 tons 13 cwt. 2 qrs., at 17. 9s. 6d. | £47 15 1            |
| Less dues (1-24th)   | 1 19 9 = 45 15 4    |
| Discounts  | 0 12 6              |
|  |                     |
| Total  | £6159 10 6          |

|                           |                       |
|---------------------------|-----------------------|
| Labour cost for July      | £827 1 4              |
| Merchants' bills          | 655 11 9 = £1482 13 1 |
| Labour cost for August    | 888 11 7              |
| Merchants' bills          | 250 17 11 = 1139 9 6  |
| Labour cost for September | 897 1 2               |
| Merchants' bills          | 426 0 0 = 1323 1 3    |
| Labour cost for October   | 994 10 3              |
| Merchants' bills          | 225 17 1 = 1229 7 4   |
| Water rents, four months  | 63 13 0               |
| Interest and commission   | 21 18 2 = 5251 2 4    |
|                           |                       |
| Leaving profit            | £ 208 8 2             |

The foregoing accounts, showing a balance (including 33/- 9s. 2d. from last account) of 941/- 17s. 4d. in favour of adventurers, having been read, it was proposed by Mr. Chas. Bailey, seconded by Mr. John Kendall, and resolved unanimously, that the account to be received with the manager's report be received and adopted, and that a dividend of 7s. per share be now declared, and paid forthwith.

The following is a copy of the agent's report submitted to the meeting:—

*Jas. 7.—The engine-shaft is sunk 4½ fms. below the 234; the lode is 10 ft. wide, worth 70/- per fm., or for length of shaft (12 ft.) 140/- per fm. Since the last meeting of adventurers we have fixed a standing lift of pumps at the 234, and the lift to the sump-winze, the sump, all in good order for working. The 234 east is hoisted to the sump-winze, 12 fms. from the engine-shaft, and that level extended 4 fms. beyond the winze; the lode, where opened the full width (9 ft.), is worth 35/- per fm. The same level is driven west of shaft 6 fms.; the lode in the end is 8 feet wide, worth 50/- per fm. The 222 is driven east of shaft 58 fms.; the lode for several fathoms driving has been worth for 5 ft. wide about 30/- per fm. In the end there are strong indications of improvement of the lode resembling that in the winze below the 212, 12 fms. before this end. The winze below the 212, 12 fms. before the 222 eastern end, is sunk 8½ fms.; the lode is 10 ft. wide for the last 2 fms. sinking, and 5 ft. driving west, worth for 6 ft. in length 140/- per fm. During the past few days the water has so much increased as to make it impossible to keep it with barrels as heretofore; we are now preparing for fixing a lift of pumps, which will be in course of working in two or three days. The 222 is driven east of engine-shaft 90 fms.; the end is 30 fms. short of the boundary; the lode is worth for the last 6 fms. 20/- per fm. We are sinking a winze below the 210, at 50 fms. west of engine-shaft, on the little cross-course, for ventilating the 222, for the purpose of driving south to cut Dunkin's lode, and for proving the engine lode to the great cross-course, about 20 fms. further west. The amount changed in the current east for these four months on account of new work for the new steam-whistle is 170/- We are still adding to the dressing-floors, especially in the erection of the newly-invented fixed frames for dressing slimes. We beg to remark, in closing our report, that the two points—the engine-shaft and the winze 70 fms. east of it, sinking into deeper ground—are unit'd of more value now than at any former period.*

The following is a copy of the agent's report submitted to the meeting:—

and furniture had been given up to the Clunes Company he thought it was the proper course to write that amount off.

Mr. W. S. SUTTON, one of the auditors, said the discrepancy of £1. had not escaped their observation, but, as the Chairman had already informed them, it arose from an error in Mr. Bland's accounts.

Mr. SPENCER HERAFATH wished to express his opinion upon the accounts. There could not be two opinions upon the desirability of their accounts being so simple that no question about them need be raised. Now, by the profit and loss account there appeared a balance to its credit of £4,000/-, while no such a sum really existed, because £500/- of that had been taken from it to pay off the mortgage upon the Collins-street property, and £600/- should, in his opinion, have been put against profit and loss to meet the cost of extra repairs. With all possible respect to the board, therefore, he would suggest that money which had positively been paid away should not exist as an asset, but should be regarded as gone, netting the remaining balance. For some years he had taken some trouble to fully understand those accounts, and he found that the total profit made by the company since it came into a dividend-paying condition amounted, according to the accounts, to £6,900/-; but the plant and machinery, which were now effectively producing an increased monthly profit, had not been put against that amount—he thought that £700/- would be a fair charge against the profit and loss, and that such an amount, therefore, should be written off. He was only expressing his opinion upon the accounts, and not in any way finding fault with the manner in which the company was managed. During the half-year there had been expended a sum of £700/-, which was regarded as an extra outlay. Instead of that being treated as an ordinary charge, it was regarded as a sort of capital charge, which would be reimbursed, and there was no doubt it was being reimbursed, as the works by that expenditure were rendered more effective, and, therefore, capable of producing larger profits. But the money had been paid away, and ought to be placed against the profit and loss account. The actual total amount remitted to this country was £39,000/-, the difference between £37,000/- and £6,000/- being accounted for by £6,000/- for salaries paid on the other side, £1700/- written off for renewals or depreciation of stock and machinery, £700/- for the extra charge to which he had referred, and £500/- for the repayment of the mortgage; therefore, in speaking of £6,000/-, they had only to deal with something like £5,000/-, which had been disposed of thus—there had been paid in dividends something like £19,000/-, about 1950/- had been invested, and there remained a balance of something like £12,000/- There had also been the directors' salaries of £1700/-, and auditors, £17/-, from the beginning of the company. He wished to make a few remarks with regard to the directors' salaries. He found that £1700/- did not amount to £10/- per director per annum. The company was now in a prosperous condition, and he must confess that he was one of those who regarded low salaries as undesirable. Although upon some occasions he had differed with their respected Chairman, Mr. Powles, upon details of finance, they could not ignore the important fact that to Mr. Powles they were indebted mainly, if not entirely, for the existence of the company at the present time. He thought they would all concur with him that, whatever complaints, imaginary or otherwise, they had made against the early management of the company, had it not been for the unyielding tenacity of Mr. Powles, who had fought against the predominant wish of the shareholders, as well as certain members of the board, the Port Phillip Gold Company would now be among the things of the past. Now, he would ask what had been the result of that almost stolid determination which their Chairman at times displayed? It was true their capital was not actually intact, but measuring the present price of the shares in the market—which, by the way, he considered a moderate price—they had their capital in value, with the addition of a premium at the rate of 50 per cent. per annum. Under those circumstances, he (Mr. Heraphath) contended that it would be a simple act of justice—of common feeling—to recognise in some way or other the services of him whose tenacity of purpose had, so to speak, perpetuated the company's existence, having strongly opposed the expressed wishes of the shareholders that it should be wound-up. He reminded proprietors that from 1852 to 1858, the directors had declined to receive the remuneration to which they were entitled, although during that period they rendered services far more important than those rendered by any paid officer of the company. But he was not prepared to submit a resolution upon the subject until he had heard the opinion of his co-proprietors.

The CHAIRMAN said, with respect to the accounts, the directors were quite ready to present them in any form that might be more acceptable or intelligible to the proprietors; and the board would be glad to adopt any suggestion that Mr. Heraphath, who had given so much attention to the subject, might make. It would be seen by the balance-sheet that the company's capital amounted to £30,777/-, and that the stock at Clunes amounted to £35,000/-, the lands and buildings at Melbourne being valued at £5000/-, so that they were employing 40,000/-, and having a capital something less than £31,000/- When they sold the land and building at Melbourne it would be merely converting an inactive item into a living one. They had a balance to the credit of the profit and loss of £4,780/- The Clunes establishment stood at £400/- more than the capital, the land in Melbourne stood at £600/-, the cash at Melbourne amounted to £326/-, the cash in England to £850/-, and bills not due to £500/-, which left to the credit of the profit and loss account the sum of £4,780/- It might be a matter for consideration whether £4500/- should be taken from the profit and loss, and reduce the Clunes establishment from £35,000/- to £30,000/-, or whether it would be a better plan to place the £4500/- to the credit of capital. All he could say was that Mr. Bland felt convinced the establishment at Clunes was fully worth £35,000/-

Mr. SPENCER HERAFATH said he recommended that £700/- should be taken from the profit and loss and added to capital.

The CHAIRMAN thought the better plan would be to make the capital agree with the cost and debt of the Clunes establishment.

Mr. A. B. TIETKENS, one of the auditors, remarked that the treatment alluded to in the sums in question, although technically informal, involved no substantial error, inasmuch as other sums of large amount had been paid out of the cash realised as profit, instead of paying them out of the proceeds of any of the other assets of the company—thus the £600/- bearing 10 per cent. interest, borrowed of the Sydney Trust Company, upon the security of the land and buildings at Melbourne, had been paid off out of realised profits, while the land and buildings remained for future realisation. If the entire subscribed capital of the company were represented in the balance-sheet—which, however, it was not—then it would have been proper to have charged depreciation against profit; but as their capital account had already been diminished by depreciation previously written off, and as the items in question were not, in point of fact, actual loss of realised profits, but only a portion of the loss by depreciation of the capital originally subscribed, and as the capital account, as it now stood on the balance-sheet, represented only what remained of the originally subscribed capital, after charging it with the losses sustained. In the first years of the company's existence, the items in question should undoubtedly, to be consistent, likewise have been charged to capital account, and not to the profit and loss account.

The resolution adopting and receiving the report and accounts was unanimously adopted. The CHAIRMAN said that the next question was that of dividend. The directors had anxiously considered that matter, and not forgetting that in theirs, as in all commercial companies, it was prudent to keep a good sum in hand, to guard against any possible contingency, and at the same time laying a foundation for the next dividend, were unanimous in recommending the declaration of a dividend of £1. 6d. per share should be made, which would form, with the distribution of £1. per share declared in July, the fourth dividend, and being at the rate of 12½ per cent. per annum. After paying that dividend, and providing for the addition to be made to the reserve fund, there would be an amount—including the bills not yet due—of about £400/- towards the distribution in July. They would, therefore, have the satisfaction of believing that they would not, at any rate, retrograde. It was to the interest of shareholders that the dividends should fluctuate as little as possible, or at least that they should not decrease. He thought he could safely promise as good a dividend in July.

The declaration of the dividend was then formally made, payable on the 15th inst. The CHAIRMAN said that the next question was that of dividend. The directors had anxiously considered that matter, and not forgetting that in theirs, as in all commercial companies, it was prudent to keep a good sum in hand, to guard against any possible contingency, and at the same time laying a foundation for the next dividend, were unanimous in recommending the declaration of a dividend of £1. 6d. per share should be made, which would form, with the distribution of £1. per share declared in July, the fourth dividend, and being at the rate of 12½ per cent. per annum. After paying that dividend, and providing for the addition to be made to the reserve fund, there would be an amount—including the bills not yet due—of about £400/- towards the distribution in July. They would, therefore, have the satisfaction of believing that they would not, at any rate, retrograde. It was to the interest of shareholders that the dividends should fluctuate as little as possible, or at least that they should not decrease. He thought he could safely promise as good a dividend in July.

The CHAIRMAN said the directors who went out of office upon the present occasion were Capt. Vetch and himself, and would be taking immediately after the meeting. The proprietors had also to elect their auditor, and with regard to the election of a second auditor, the deed required that he should be elected by the directors at their first meeting after the general meeting. The board were anxious to get rid of that election, upon the ground that it was a matter that should be placed solely in the hands of shareholders. The directors had consulted the solicitor upon the subject, who was of opinion that without a supplemental deed it could not be done.

Mr. SPENCER HERAFATH had much pleasure in proposing the re-election of Mr. W. S. Sutton, as the shareholders' auditor. In his remarks he (Mr. Heraphath) made upon a previous occasion he begged to say that he had not intended to make the slightest reflection upon the directors' auditor. His remarks were made generally—that auditors should be appointed exclusively by the shareholders.—Mr. BRICKWELL seconded the proposition for the re-election of Mr. Sutton as auditor, which was put and carried unanimously.

The CHAIRMAN informed the meeting that the directors would re-elect Mr. Tietkens as the second auditor.

A resolution was then passed, appointing Mr. Macdonnell, Sir C. H. J. Rich, and Mr. West by the company's trustees, and the sum of £600/- was voted as remuneration for their services during the past year.

The Rev. Mr. ROBINSON proposed, and Mr. HERAFATH seconded, a proposition, which was put and carried unanimously, voting to the original directors, of which there are three—the Chairman (Mr. J. D. Powles), Sir C. H. J. Rich, Bart., and Capt. J. Vetch, the sum of £600/-, in consideration of the services rendered from 1852 to 1858, during which period they had relinquished the remuneration to which they were entitled.

The CHAIRMAN acknowledged the vote in appropriate terms.

Mr. HERAFATH, in answer to a question with regard to limited liability, stated that the subject was at present in abeyance, but he did not see how it could easily be carried out in the face of the present premium upon the shares.

The CHAIRMAN said their board would be ready at any time to entertain any plan that shareholders might suggest, but he reminded them that in case of any unforeseen eventuality they had a resource in the reserve fund, which was continually being augmented. He might mention that the law in Melbourne now allowed of a company like this being placed under limited liability, and, as the company did not contract any liability in England, if they determined upon taking the benefit of the colonial law, the desired end would be accomplished.

A unanimous vote of thanks to the Chairman, directors, and the resident director in Melbourne was then passed, when the balloting was proceeded with, which resulted in the unanimous re-election of the retiring directors.—The proceedings then terminated.

**THE MINING MARKET IN 1861.**—A short historical record of the movements in the Mining Markets during the past year has just been published by Messrs. Webb and Geach, in the form of "A Brief Review of the British and Foreign Mining Markets for the year 1861, with prices, dividends, ore sales," &c. The review, which consists of 12 distinct sketches, showing the position of the market, and price of shares in each of the 12 months, is followed by a series of remarks, which introduce the statistics of the copper, lead, and tin sales, as published in the *Mining Journal* from Sept., 1860, to Sept., 1861. The work will be found very useful to those who desire to possess a good epitome of the mining business of the year, with the returns of the sales of ores, a collected and compact form.

**BIRLEY COAL COMPANY.**—A limited company, with a capital of £50,000/-, in 17 shares, has been formed for working the Birley Colliery, near Gateshead, and within 4½ miles by railway of the Tyne. We shall probably be able to publish the prospectus in detail in next week's *Journal*.

**DISSOLVING PLATINA IN "AQUA REGIA."**—In operating on a large quantity of platina, a long time is required, during which the operator is exposed to the acid fumes; and frequently a loss of from 1 to 6 per cent. is experienced, owing to the formation of an insoluble chloride. Doctor Dulio finds that both these inconveniences may be avoided by boiling under a slightly increased pressure, which he obtained by passing through the cover of the matress a bent glass tube, the vertical branch of which contains a column of about 3 ft. of water. The platina dissolved rapidly, and left no residue.—*Jour. für Prakt. Chem.*

**HOLLOWAY'S OINTMENT AND PILLS—RELIABLE REMEDIES.**—In burns, wounds, sprains, glandular swellings, enlarged veins, neuralgic pains, and rheumatic tortures, the application of this soothing ointment to the affected part not only gives the greatest ease, but likewise cures the complaint. The pills generally promote the curative action of the ointment. Both remedies may be safely used by the most inexperienced nurse; they should find a place on every toilet, and in every nursery. They successfully supersede the use of all dangerous cosmetics, and render the skin soft and silky.

It is unnecessary to expatiate further on the excellence of Holloway's ointment and pills, whose merits have kept them so long before the public, and secured for them universal approbation.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

**TREGOSS HEAD TIN MINE (Roche).**—In last week's *Journal* I observe a paragraph in the Mining Notabilia respecting this mine. I was the first person who inspected the lode after the streamers had discovered it, which was then 10 feet from surface, and as little could be seen of the lode, I suggested that a shaft be sunk, which was done, I think, 5 fms. deep, and the lode intersected, and driven on 5 fms. west. I was again employed to inspect the lode, which was 3 ft. wide, and worth 4 cwt. of tin to the 100 sacks. After this another shaft was sunk 9 fms., and the lode cut into. I was again employed to look at the lode at this point; the lode here was 3½ ft. wide, and worth 5 cwt. per 100 sacks. My opinion is that Tregoss Head will become a good paying mine, the stratum being very congenial for tin. It should be remembered that I have no connection with the company, neither do I know the party who holds the sett, having left the country, and I wish them every success, feeling assured that they will have a good mine.—THOMAS PARKIN: Wells, Jan. 9.

**THE LEAD MINES IN THE MINERA DISTRICT** are progressing favourably, and, although the Minera Mine is the only one at present paying a profit to the shareholders, there is every reason to hope that two or three other mines in the neighbourhood will be in a position to declare dividends before the year 1862 is out.

**TRENCROM MINE (Lelant).**—On reading the reports of this mine, one is struck with its apparent poverty—so low prices and small values; yet the poverty is only apparent. At the last meeting the agents said enough to show they would pay all costs for the present quarter, and, from all I can hear, I think a fair commencing profit will be given. It is a matter of surprise to me and others why, with such small values in the future, they can raise and sell so much tin. I presume there must be some small local standard for valuation (say), 40/- per ton for tin, which sells at about 70/- Another matter of surprise is that there is a mine in 1024 shares only, with, I think, near 17/- paid-up, quoted only about 27/-, one broker being anxious to buy at 26/-! This mine is situated in the heart of the well-known tin district of Lelant, adjoining those ancient rich mines Wheal Mary, Wheal Reeth, Wheal Kitty, &c., and in the direct run of Margaret lodes. It is near paying costs, opening a vast quantity of profitable ground, and dividends must come soon, yet the whole concern quoted at about 2000/- I am an old-fashioned shareholder, not a speculator in shares; but when I look at these, I am led to wonder why those who want to make money, and without any apparent risk, do not buy those shares.—AN ADVENTURER: Jan. 8.

**ROSEWARNE CONSOLS.**—About 15 fms. of good ore ground, that will be worked at 2s. 6d. to 4s. in 17. tribute, has been driven over in the 30, east of Ellen's shaft. This end is a long way in advance of the 20 and 40; both these levels are being pushed with all speed, to cut the ore ground, and when the ore is cut in them they will give good profits. The mine is opening well.

**PENGENNA (St. Kew).**—This mine, the only one at work in this neglected district, appears to be about to realize the expectations long held out by Mr. N. Ennor. In driving the adit east the lode has much improved in quality, and is producing saving work. A few fathoms further driving will bring the end under the place where a great deal of lead was found in cesteaming at surface, at which point Mr. Ennor has always predicted that a deposit of lead would be found. Should a discovery be made, it would doubtless give a great impetus to mining in this district, which has of late years been so strangely neglected.

**MINING IN THE COUNTY OF MONTGOMERYSHIRE.**—My interests calling me into the neighbourhood of Montgomeryshire, I beg to submit a few remarks on the present prospects of the mines in that district generally. In a journey from Machynlyth to Llanddewi you meet in the first instance with the RHOGBYDOL and BACHBEDDON MINES, which have been worked for some years by the present company, and, I am glad to understand, are now steadily improving. The machinery on the works is in excellent condition, and of first-class quality. A little further east is the LLANRHYAU MINES, the property of Sir Edward Conway, who, I understand, is working it to a hand—a small local standard for valuation (say), 40/- per ton for tin, which sells at about 70/- Another 17/- paid-up, quoted only about 27/-, one broker being anxious to buy at 26/-! This mine is situated in the heart of the well-known tin district of Lelant, adjoining those ancient rich mines Wheal Mary, Wheal Reeth, Wheal Kitty, &c., and in the direct run of Margaret lodes. It is near paying costs, opening a vast quantity of profitable ground, and dividends must come soon, yet the whole concern quoted at about 2000/- I am an old-fashioned shareholder, not a speculator in shares; but when I look at these, I am led to wonder why those who want to make money, and without any apparent risk, do not buy those shares.—AN ADVENTURER: Jan. 8.

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**PENGENNA (St. Kew).**—They have set a pitch in the back of the 35 to three men, at 12s. in 17. for lead. The increase of water at the bottom of the shaft has induced the captain to alter their intention of fixing a drawing-lift, and they will now fix a plunger-lift at once instead. They will sample the lead on Saturday.

**NORTH TRESCREBY.**—A very satisfactory meeting was held on the mine on Tuesday, when the costs to end of November were brought up, which showed a loss on the three months of £422. 10s., but the additional month's cost of November with the merchants' bills amounted to £972. 18s., and but for this the profit for Sept. and Oct. would have been £535. 8s., and would have thus shown a credit balance in favour of the mine of £173. 9s. 4d., instead of, as at present, £754. 11s. 4d. By adopting, however, this course the mine is now placed in a very sound financial position, and at the next meeting it is fully expected that dividends will be commenced, and from the highly satisfactory report of the manager there cannot be a doubt but that they will be long continued. It is also very encouraging to state that although November costs have been charged the ore for that month has not been credited. The ground in the bottom level is more favourable, and are for some time under a fresh management, and I believe are being prosecuted with prospects of early returns. The next to the above is the PANTMINE MINES, which is under the able management of Messrs. J. Taylor and Sons, and is progressing favourably. Nearer Llanddewi are the BYNTAIL and PENELYN MINES; the former has been worked in a spirited manner by the present company, and it is to be hoped from the prospects that they will be rewarded for their outlay. Penelyn, which has lately been brought out under a London company, is at the present time very quiet. In conclusion, I may state, on the whole, I consider the present prospects of mining in Montgomeryshire in a more flourishing state than they have been for many years.

**EAST BASSET.**—The lode in the 90 has been cut rich, and the samplings will in future be very much increased. The mine altogether looks very well.

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large amount of the company's money in paying the expenses of deputations or committees. The result of these visits are most frequently to inflate their minds with an unwarranted appreciation of the properties in question, whereby they tend to mislead the public, who are ignorant of their abilities to judge of what they have seen or heard. Let us leave, however, this unpleasant but too truthful subject, and turn to the legitimate mining market, in which we find East Cardon, East Carn Bras, Wheal Seton, Clifford, South Frances, Marke Valley, Wheal Grylls, and many other mines have been largely dealt with to the advantage of the buyer and the seller. Such business as this is highly satisfactory to all parties. In the mines in question the buyer gets value received for his money, with a good chance of a large profit on his outlay; and therefore it is that I would suggest to those who invest or speculate in mines to select such as the basis of their operations, for the chances of discoveries and improvements are infinitely greater in these than in such schemes before alluded to, in which the chances are fifty to one against again seeing either principal or interest for the money invested.—P.S. East Carn Bras shares close this (Friday) evening firm at 10% 11s., with a strong upward tendency.

## MINERAL WEALTH OF CALIFORNIA.

**THE RUSS MINING DISTRICT.**—This rich region of silver takes its name from the superintendent of an exploring party or expedition, which set forth on a voyage of discovery from San Francisco, California, March 4, 1861.

The inception of this exploring party was induced from the belief that the Comstock silver lode of Washoe, Nevada territory, was but the weak part of a strong belt of mineral further south; and the result of the explorations has proven such to be the case.

The success which rapidly followed the discovery and partial development of the Comstock lode created many "prospecting parties," whose field of operations were from Washoe through the mountains south of that place, and by some of these parties another part of the mineral belt was discovered, about 120 miles south from Washoe, and named as the "Esmeralda district;" the ores of this district were found to be of great value, but the lodes generally are not very thick, which creates a belief in the minds of practical men that the volcanic action at this particular point has been of less force than in the Washoe or Russ districts; but that it may, another extension of mineral having been found in direct line with that of Washoe, and at a great distance therefrom, established the belief that at some point, even further south, other links of the great chain might be discovered of greater extent, if not of richness, than those comprising the Washoe and Esmeralda districts. Accordingly, Mr. Horace F. Russ, who has been identified with the mineral interests of California for many years, formed the "New World Exploring and Mining Expedition," and was elected by its members as the superintendent of the same. After travelling from San Francisco about 500 miles south-east, a detachment of the company ascended the Sierra Nevada Mountains to their summit on the western slope, and prospected the same for a distance of about 40 miles, but no mineral of any kind could be found; the entire formation of the mountains being smooth and featureless, the latter in great excess. On the return of the party to camp, in a place called Cane Brake, at the base of the Sierras, it was determined to cross the mountains through Walker's Pass without delay, travel up the edge of the "Grand Desert" to Owen's Little Lake, divide the forces, work up from that southern point towards Esmeralda, giving the country between the starting point and the latter place a thorough examination by lateral line, running from the eastern base of the Sierras due east about 60 miles; by this method it was believed that no part of the mineral belt of sufficient magnitude to be worthy of attention could escape detection or discovery by the explorers. The country east of Owen's Little Lake is without exception the most desolate and forsaken of any that the white man of this continent has ever travelled over. Extinct craters form the broken mountains, whilst the valleys are trembling from some hidden thunders below, masses of pure sulphur were deposited at different points, a jet of steam issuing from the centre of each mass, rising in puffs to the height of from 10 to 20 ft., and the shuddering traveller feels the uncertainty of the ground over which he is passing. "Hell's Half-Acre" is the title of a chosen spot, about 15 miles east of Owen's Little Lake; it is not a misnomer, for the rambling below the hissing steam at many points, and the perfume of sulphur everywhere, claims it as an entry to the territory of Beelzebub; but American energy knows no boundary to its research; that half-acre has been intruded up, and it is a little singular that since a regular trail has been established through that country as a short cut to the Coso Mts., those jets of steam no longer play, and the tremulous motion of the ground has ceased. Many mountaineers believe that His Sathanic Majesty, being offended by the intrusion, has moved his underground works farther south. At or near Owen's Little Lake there is a wall of black lava, which stands almost perpendicular (in the highest place about 500 feet), and continues unbroken for four or five miles. This lava is the first evidence presented on the eastern slope (to travellers going through Walker's Pass) of decided volcanic action of more recent date than that which formed the great Sierra chain. At a parallel line, 27½ miles from this wall (east), there is a corresponding line of lava, and these two walls or lines form a kind of basin, inside of which are the craters, &c., heretofore described; as soon as the eastern wall or line is crossed towards the east the face of the country is changed, and detached portions of quartz-lodes are plainly visible. The matrix is here found to contain both gold and silver, but not in sufficient quantity to promise the existence of a future mining region. The primitive rocks are here broken into such small fragments as to deny the presence of lodes of mineral in any considerable length, for it is obvious that when the strong vibrations of the universe is shocked into atoms, a delicate thread of silk, weakened by its embrace, of soft metallic properties must share a similar fate; hence the exploring party, after taking a survey for eight or ten days, concluded that section of the country as valueless, and dividing their force, moved off in opposite directions, north-west and south-east. The details as presented in the reports of the two sections of the exploring party are too voluminous to be rendered in this communication. Their privations were of such a character as usually attend explorations beyond the pale of civilisation. The party who went south-east discovered on the Panamint Mountain heavy loads of sulphuret of antimony from 25 to 60 ft. in thickness; 500 lbs. of this ore has recently been brought to this city for assay. It is thought by sinking upon these lodes the excess of antimony will give place to arseniferous galena, or the more perfect sulphuret of silver. To prove this, a superintendent and six miners, with adequate quantity of provisions and tools, have been dispatched to that region known as the "Telescope District" (name derived from the peculiar shape of the mountains), to sink at least 50 ft. on one of the lodes, and convey to San Francisco as much of the ore from the lowest depth as they may have facilities for carrying thither by pack animals.

The party who went north-west were more fortunate—in fact, a description of their discoveries never can be believed by those who have not seen them, and even then their magnitude could not be comprehended. About 17 miles north of Owen's Great Lake (vide map) the superintendent, at a distance of eight miles from their camp, believed that he saw a range of mountains of a different character to any hitherto found—clean and unbroken upon the surface, formed in ridges as though they contain some vertebral, which suggested their peculiar shape. On the following morning the superintendent, accompanied by Dr. George, one of the explorers, left camp for the purpose of prospecting the range described, when within about two miles the croppings of the large lode, apparently quartz, became visible to the eye upon the summit of one of the foot hills or spurs attached to the main range. Upon arrival at the base of what seemed at a distance to be a low foot hill, upon which the croppings rested like a formidable fortification, it was found to be difficult of ascent. After three hours hard climbing the two gentlemen reached the summit; and well they were repaid for their labour, for there reposed like a mighty "silver giant" a lode of "arseniferous galena," from 60 to 80 ft. in thickness at that place. This lode the superintendent named the "Union Lode." Upon the ground there were hundreds of tons of loose ore, which probably had been accumulating for centuries; as the surface of the mountain wasted away the lode fell for want of its usual lateral support. Some of the ore was taken to camp and assayed, and found to contain \$179 per ton of 2000 lbs. Gold was easily traced at the base of the pril or test, but preparation had not been made for the separation of the precious metals, and it was all calculated upon the standard value of the inferior metal, silver. Upon actual survey, taking the valley as the base line, it was found that this lode contained above the level of the valley, in the distance of 8100 linear ft., over 3,000,000 tons of silver ore; and as all the silver mines of the northern districts have proved richer as the miners descended, who then can calculate the value of the mineral in the Union lode? Urged on with renewed energy, the explorers set to work earnestly to prospect the mountain north and south of the Union lode; the ground south was very much broken; the spurs of the mountain were irregular in their form, and no trace of matrix or mineral could be found; but north of the "Union" nearly every foot hill presented the croppings of a large quartz lode of silver ore, and in less than 30 days of prospecting, the exploring party, the owners, by discovery, of 22 silver mines, the smallest being at least 10 ft. in thickness. It may be interesting to your readers to explain how these lodes of mineral are taken up, claimed, and sold, and the character of the laws which govern the possession and working of the same.

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below the 70 west the lode is 2 ft. wide, worth \$2. per fathom. Annie's shaft is sunk 4 fms. below the 50, and the ground still favourable for sinking. In the 50 east the lode is 2 ft. wide, producing good stones of tin.—Trial Shaft: This shaft is sunk 6 fms. below the 40; the lode in this shaft is 2 ft. wide, rather disordered, yet containing some good work for tin. In the 40 east the lode is 3 ft. wide, worth 10f. per fm. We have communicated the rise in back of this level with the winze sinking below the 30, and commenced stowing the back of the 40, east of orifice; the lode is 4 ft. wide, worth 30f. per fm.

PENGENNA.—E. Hitchins, Jan. 2: At the adit end we have cut through the two lodges. The south lode is from 18 in. to 2 ft. wide, composed of lead, pyrany spar, and iron, and the north lode is from 3 to 4 ft. wide, composed of lead, pyrany spar, and iron; at this point the lode looks well. There is the most lead in the north lode; this is saving work, and there is every indication of making a good lode to the east. We have several fathoms of leady ground already gone through, and we have commenced to drive on the course of the north lode, in the capes between the two lodges, and we shall be obliged to take away the south lode for some time to make room. The lode is very wet, and its direction is about north-east.

PENTRE LYGAN.—Jan. 8: We are sinking the shaft by twelve men, and using all the dispatch possible, having cleared it down and cut lode in the 30. The shaft is now about 6 feet below the level.

PROSPER UNITED.—J. Morcom, Jan. 9: Louisa's engine-shaft has been cut down and secured 9 ft. below the 40 fm. level, and is now sinking by twelve men, at 18f. per fathom; the shaft is being sunk perpendicularly. The 40 fm. level has been driven 6 ft. west; the lode is about 6 ft. wide, and is worth quite 20f. per fm. for copper and tin. The 40 fm. level has been extended east of the cross-cut 22 fms., the lode is from 3 to 6 ft. wide, and for all the distance driven has laid open ground that will let at from 3x to 4x in 11' on tribute. The 30 fm. level has been extended 43 fms. west of the said shaft, the lode being on an average from 3 to 6 ft. wide, which will let at very moderate tribute; in this level they met with a new lode, which has been opened on about 10 fms. west, worth on an average from 50f. to 70f. per fm., and the present end is worth 60f. per fm. for copper and tin, with a very promising appearance for continuation; about 9 fms. behind the end a rise has been put up, and communicated to the 20 fm. level, through a lode which has been worth on an average from 50f. to 60f. per fm. for copper and tin. Hill's shaft is being sunk below the surface perpendicularly, which will come down on this bunch of ore; the said shaft has been commenced to sink below the 30 fm. level, in a bunch of ore and tin similar to that driven through in the level. The 20 fm. level is also being driven through a good lode, worth from 25f. to 30f. per fm.; the ground on the new lode being very soft, will enable them to open up very fast. The 40 fm. level is at present being driven through the elvan, to see the lode on the opposite side; there are two lodges running parallel with this elvan, one on either side. The 20 fm. level from Henry's shaft is being driven through a lode 5 ft. wide, worth from 20f. to 25f. per fm. Hosking's engine-shaft has been cut down and secured to the 40 fm. level, and are again preparing to continue to do so below that level. The eastern levels from the said shaft are being cleared, in order to lay open the lodges in that part of the mine. A new shaft is being sunk to the new lode, west of Hill's shaft; the said shaft will intersect the lode about the 30 fm. level. Large quantities of tinstuff are at the surface, and as soon as the stamps are in order they can raise immense quantities from underground. Two 70-inch pumping-engines and two 24-inch steam-whims have been erected, with steam-captains attached, which are at work; also a 30-inch stamping-engine is in course of erection, with sixty-four heads attached; these engines are all of the newest designs. The work throughout the mine is being laid out in the most substantial manner, and nothing more has been done than is actually required to carry out a mine of this description. With respect to the future prospects of the mine, I am of opinion it is only necessary for the proprietors to wait the necessary erection of machinery to make the produce of the mine marketable, when the mine will tell its own tale, and soon be in a position to compete with many of the best mines in Cornwall.—F. S. The steam-stamps will be in order to work about the end of March.

—W. H. Martin, Wm. Miliott, Jan. 9: Louisa's engine-shaft is sunk 9 feet below the 40, and let to twelve men, to sink at 18f. per fathom. At Hosking's the forking-lift is dropped 4 fathoms below the 40, and the shaft cut down complete to the bottom of the level. The lode in the 40, east of Louisa's shaft, is at present disordered; in the same level, driving west, the lode is 3½ ft. wide, producing good quality stamping work for tin. Good progress is still being made in the 40 cross-cut to intersect the lode north of the elvans. In the 30, west of ladder-rod shaft, the lode fully maintains its size, and will yield 5 tons of copper ore per fathom; the lode is also yielding rich work for tin. In the 20, west of ladder-rod shaft, the men are at present engaged taking down the north part of the lode close to the elvans, which is producing fair quality stamping work. The lode in the 30, west of Henry's shaft, is 4 feet wide, yielding work for tin of about the same quality as for some time past. Hill's whim-shaft is down 11 fms. from surface, and let to sink by six men, at 30s. per fathom. We have commenced to dress a parcel of copper for sampling. There is no particular change in any other department to notice.

PROVIDENCE.—Wm. Hollow, P. Rogers, W. Dunstan, Jan. 9: There is very little change to notice, but, on the whole, we are looking a shade better than when last reported.

RHEIDOL.—Capt. Ridge, Jan. 3: Rhurruugus Engine-shaft: In the 12, Gwaiethoch lode is the whole width of the level, composed of flookan, spar, and sulphur. The deep adit level, driving on the south branch of the lode, is 9 in. wide, of spar and spots of lead, which affords a very kind appearance for lead. Rhurruugus deep adit level is upwards of 5 ft. wide, yielding 4 tons of blende per fm., and stones of lead.

RHOSWYDOL AND BACHEIDDON.—Jan. 7: Fine open weather has come once more. We are going on with drawing stuff as quick as possible from underground, and are at full work dressing the same on the floors. The only bargain set for January was rising and sloping in the 65 east, taken by 16 men. Provided this weather continues, we shall very soon have a lot of time to ship.

ROSEWARNE CONSOLS.—T. Uren, James Berryman, Jan. 8: The 20 end, east of Eileen's shaft, is looking well; the lode is now 2 feet wide, 8 in. of which is very good copper ore, worth 12f. per fm. The lode in the 20, east of Eileen's shaft, is yielding stones of ore, and gradually improving as we drive towards the ore ground gone up in the back of the level below. There is no change in the 40, east of engine-shaft, since last report; this we are pushing on with all speed to get under the ore ground in the 30.

ROSEWARNE UNITED.—H. Woolcock, Jan. 9: In the 90, east of Jennings's, there is no alteration since last week. In the 90, west of footway, the lode is 2 ft. wide—unproductive.

In the 80, west of footway, the lode is 3 feet wide, producing a little ore.

In the 70, west of Jennings's, the lode is 2½ ft. wide, producing stones of ore.

In the 60, west of Richard's, we have cut through the lode, which is 4 to 5 ft. wide, producing some good work for tin and copper, but has not been seen sufficient as yet to ascertain its value.

In the 40, east of Lane's shaft, we are driving north to cut the north lode seen in the 34, north of Wellington's shaft.

In the 34, west of Bush's shaft, the lode is 12 in. wide; this end has very much improved in appearance in the last two or three weeks.

In the 34, west of Wellington's shaft, the lode is 2 ft. wide, with a very promising appearance, and producing a little tin and stones of copper ore.

In the 34, west of the cross-cut at Wellington's shaft, on the north or copper-bottom lode, the lode is 18 in. wide, with a very promising appearance.

ROUND HILL.—R. Waters, Jan. 8: The lode below the 62, north of engine-shaft, is 3 feet wide, worth 8 cwt. of lead ore per fathom. The lode in the stopes in the back of the 62, south of No. 1 winze, north of the shaft, is 5 feet wide, worth 1 ton of ore per fathom. The lode in the stopes north and south of No. 2 winze, in back of the same level, will yield 25 cwt. of ore per fathom. The lode in the drift, driving north below the 52, north of the shaft, is 20 in. wide, worth 1 ton of ore per fathom. The lode in back of the 62 south is 3 feet wide—poor. No change to notice in either of the tribute pitches. Our last parcel of lead ore, sold to Messrs. Walker, Parker, and Co., is being taken to Minsterley with all speed.

SORTRIDGE CONSOLS.—J. Richards, Jan. 9: Hitchins's shaft: In the 40 west, and west of Williams's rise, on the north part of the main lode, the lode is exceedingly promising, being composed of congenital quartz, mundic, capel, and ore, worth 2 tons per fm.

In Williams's rise, in the back of the 40 west, the lode is 2 ft. wide, and worth 1 ton of ore per fm.

In the 40 west, and west of Rowe's cross-cut, on the north part of the lode, the lode is from 1 to 2 ft. wide, and worth ½ ton of ore per fm.

In Jenkins's rise, in the back of the 50, on the south part of the main lode, the lode is 1 ft. wide, and yields stones of rich quality ore.

In Mayne's stop, in the back of the 50, on the south part of the main lode, the lode is 5 feet wide, worth 2 tons of ore per fm.

In Crow's stop, in the bottom of the 40, on the south part of the main lode, the lode is also worth 2 tons of ore per fm.

In Grubbin's rise, in the back of the 40, on the south part of the main lode, the lode is also worth 2 tons of ore per fm.

In the 50, south of the main lode, the lode is 2 ft. wide, consisting of capel, mundic, peach, quartz, and good stones of ore.

In Dunn's rise, in the back of the 20, west of the eastern shaft, on the south part of the lode, the lode is 18 inches wide, and worth ½ ton of ore per fm.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 4: In the 90 west, on No. 3 lode, and also the cross-cut north, we have no change to notice. In the rise above the 62, on No. 7 lode, we have a floor of spar which for the present rather retards our progress. In the winze below the 40, on the same lode, we are making fair progress, and are using every effort to communicate with the rise above the 62 by the end of this month. The 47 cross-cut is without any alteration.

SOUTH CONDURROW.—Wm. Richards, Jan. 4: In the engine-shaft, sinking below the 40, the lode is 5 feet wide, composed of spar and peach, thickly impregnated with copper ore and mundic.

In the 40 east the lode is about 4 feet wide, composed of spar, mundic, and copper ore, and just of the same appearance as the lode in the engine-shaft.

The lode in the adit west from the engine-shaft is about 2 ft. wide—unproductive. Other parts of the mine are without change to notice since last reported on.

SOUTH CRENTER.—E. Chegwin, Jan. 7: In the flat-rod shaft sinking below the 105, west of flat-rod shaft, the lode is 2½ ft. wide, producing 1 ton of copper ore per fathom.

In the 51, west of cross-cut, the lode is 2 ft. wide, producing good stones of tin and spots of copper ore.

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priar, spotted with mandic, jack, and lead, with a promising appearance; the lode is improving both in size and in quality as we extend east, and I feel confident we shall have a good mine in depth.

**WHEAL TRELAWNY.**—F. Pryor, R. Pryor, T. Grenfell, Jan. 2: Smith's shaft is now down to the 182'; the men are engaged cutting a plat, preparatory to driving the cross-cut to intersect the lode at this level. The 172' south is worth 5d. per fm. The 172' north has a better appearance to-day than we have ever seen it before; present value 7d. per fm. The 162' south is worth 10d. per fm. The winze below this level is worth 6d. per fm.; the men are now engaged in cutting plat at Chippendale's in the 162'. The 152' north is improving in appearance, and we expect in our next to report much more value than to-day. The 152' south lode, is worth 10d. per fm. The 142' north of Trelawny, is also improving in appearance, worth to-day 10d. per fm. The rise in back of the 142' is worth 7d. per fm. In the 132' north we are driving by the side of the lode. Our pitches, on the whole, are not quite so well as last reported.

**WHEAL TREMAYNE.**—R. Williams, J. Williams, Jan. 6: At the boundary engine-shaft the rise in back of the 132', on the engine lode, will be communicated in the course of the week with the 120'; the lode in the same is yielding low-price tinstuff. In the 120', east of Allen's shaft, on Allen's branch, we have not intersected the main branch east of the rockan; the men are still engaged cross-cutting north. In the skip-shaft sinking under the same level, on Allen's branch, the branch is disordered, and yielding low-price tinstuff. In the 113' cross-cut, south-east of the same shaft, we have intersected a branch worth about 6d. per fm.; in the cross-cut north there is no change to notice. The stopes in back and bottom of the same level, on Allen's branches, are mining as usual, worth on an average 12d. per fm. In the 103' east of the same shaft, on Allen's branch, the branch is worth 12d. per fm.; the stopes in back of the same level is worth 12d. per fm. At the skip-shaft the men are proceeding as fast as possible with the cutting down and fixing the skiproad in the 90' and the 103' fm. levels. The engineers and shaftmen are progressing satisfactorily with their respective work.

**WHEAL UNITY CONSOLS.**—W. H. Reynolds, Jan. 4: The lode in the 50' west is fall 2 feet wide, composed of soft spar, prian, &c., with a good mixture of rich copper ore; the end is improving, and we hope soon to have a fine course of ore in it.

—W. H. Reynolds, Jan. 8: The lode in the 85' east is improved to 3d. tons of ore per fathom, and still going better. In the 75' and 50' west the lode is still improving, especially in the latter, where we are breaking some nice rich copper ore.

—W. H. Reynolds, Jan. 7: In the 85' east the lode is improving, and now opening up tributary ground. The lode in the 75', west of cross-course, is large, with good ore in it, and likely to go better as we leave the cross-course. In the 50' west the lode is 2 ft. wide, with a leader on the footwall made up of soft spar, prian, peach, and rich copper ore throughout. The character of the lode and strata is very similar to where we had the rich deposit east of cross-course, and we are expecting to cut into a fine course of ore. In the 50' cross-cut south the water is increasing, and we hope the south lode is not far ahead. No change in the 50' cross-cut north since my last.

**WORVA'S DOWNS.**—R. Harry, Jan. 7: In consequence of a choke in the shallow adit level we have not broken so much tinstuff in the past quarter as we otherwise should have done; as it is, however, we have sold 3 tons 12 cwt. 3 qrs. of black tin, realising 24d. 12s., which, considering the small quantity of new ground as yet laid open, and the limited number of men employed, is most satisfactory. In the deep adit east we have driven through several fathoms of profitable tin ground, and the present end, which is being pushed on with all speed, is in a beautiful tin-bearing stratum of the most congenial character. This we consider important, from the fact that the drive is extended a great many fathoms further east than any of the former workings, and is fast approaching a caunter lode some few fathoms ahead, at the intersection of which we expect to meet with something good. On the whole, I consider our prospects are encouraging, and am fully persuaded that beneficial results will be realised when the mine is fairly laid open.

**YARNER.**—R. Barkell, Jan. 8: The new engine-shaft is in regular course of sinking by twelve men; there is a little water coming in the shaft, but not of much importance. The two stopes in the back of the 30' still continue to yield 5 tons each per fm.; the 30' west about 3 tons: the winze sinking below this level 2½ tons; and the 40' west 1½ tons per fathom. The 40' east is poor, but we think we are nearing the main part of the lode, as water is issuing very strong from the end.

## The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, January 10, 1862.

| COPPER.                                    | £ s. d.        | BRASS. | Per lb.   |
|--|----------------|--------|-----------|
| Best selected... d. ton                    | 110 10 0       | —      | 10d.—11d. |
| Tough cake.... "                           | 107 10 0       | —      | —         |
| Tin..... "                                 | 107 10 0       | —      | —         |
| Burns Burns.... "                          | 103 0 0 (Nom.) | —      | 10d.—11d. |
| Copiapo.....                               | —              | —      | —         |
| Copper wire..... p. lb.                    | 0 1 2          | —      | —         |
| ditto tubes.....                           | 0 1 2          | —      | —         |
| Sheathing & bolts ..                       | 0 1 0          | —      | —         |
| Bottoms.....                               | 0 1 1          | —      | —         |
| Old (Exchange).... "                       | 0 0 10½        | —      | —         |
| IRON.                                      | Per Ton.       | —      | —         |
| Bars, Welsh, in London.....                | 6 5 0          | —      | —         |
| Ditto, to arrive.....                      | 5 17 6 6 0 0   | —      | —         |
| Nail rods.....                             | 7 0 0          | —      | —         |
| " Stafford, in London                      | 7 0 0 7 10 0   | —      | —         |
| Bars ditto.....                            | 7 5 0 8 0      | —      | —         |
| Hoops ditto.....                           | 8 10 0 9 0     | —      | —         |
| Sheets, single.....                        | 9 0 0 2 10 0   | —      | —         |
| Fig. No. 1, in Wales ..                    | 8 0 0 4 0 0    | —      | —         |
| Refined metal, ditto ..                    | 4 0 0 5 0      | —      | —         |
| Bars, merchant, Tees ..                    | 5 0 0          | —      | —         |
| Ditto, merchant, Tees ..                   | 6 10 0         | —      | —         |
| Ditto, railway, in Wales ..                | 5 0 0 5 2 6    | —      | —         |
| Ditto, Swed. in London ..                  | 12 0 0         | —      | —         |
| To arrive.....                             | 12 0 0         | —      | —         |
| Fig. No. 1, in Clyde ..                    | 3 8 0 9 18 0   | —      | —         |
| Ditto, f.o.b. in Tees ..                   | —              | —      | —         |
| Ditto, forge, f.o.b. in Tees ..            | —              | —      | —         |
| Staffordshire Forge Pig ..                 | 3 10 0 3 12 6  | —      | —         |
| Welsh Forge Pig ..                         | —              | —      | —         |
| LEAD.                                      | —              | —      | —         |
| English Pig .....                          | 20 5 0 21 0    | 0      | —         |
| Ditto sheet .....                          | 21 0 0         | —      | —         |
| Ditto red lead .....                       | 22 10 0        | —      | —         |
| Ditto white .....                          | 28 10 0 30 0   | 0      | —         |
| Ditto patent shot .....                    | 22 10 0 23 0   | 0      | —         |
| Spanish .....                              | 19 10 0        | —      | —         |
| At the works, 1s. to 1s. 6d. per box less. | —              | —      | —         |

  

| COPPER.      | £ s. d.   | BRASS.    | Per lb. |
|--------------|-----------|-----------|---------|
| Sheets ..... | —         | 10d.—11d. | —       |
| Wire .....   | 10d.—11d. | —         | —       |
| Tubes .....  | 10d.—11d. | —         | —       |

  

| FOREIGN STEEL.                    | Per Ton.        |
|-----------------------------------|-----------------|
| Swedish, in kgs (rolled) ..       | —               |
| (hammered) ..                     | 16 0 0 17 0 0   |
| Ditto, in faggots .....           | 17 0 0 17 10 0  |
| English, Spring .....             | 18 0 0 23 0 0   |
| Beasmere's, Engineers' Tool 44 .. | 0 0 —           |
| Spindles .....                    | 30 0 0          |
| QUICKSILVER.                      | 7 0 0 p. bottle |

  

| SPelter.        | Per Ton.       |
|-----------------|----------------|
| Foreign .....   | 18 10 0        |
| To arrive ..... | 18 0 0 18 10 0 |

  

| tin.                        | —               |
|-----------------------------|-----------------|
| English, blocks .....       | 120 0 0         |
| Ditto, Bars (in barrels) .. | 121 0 0         |
| Ditto, Refined .....        | 122 0 0         |
| Banca .....                 | 124 0 0 126 0 0 |
| Straits .....               | 121 0 0         |

  

| TIN-PLATES.                 | Per Ton.        |
|-----------------------------|-----------------|
| In sheets .....             | 24 0 0          |
| TIN.                        | —               |
| English, blocks .....       | 120 0 0         |
| Ditto, Bars (in barrels) .. | 121 0 0         |
| Ditto, Refined .....        | 122 0 0         |
| Banca .....                 | 124 0 0 126 0 0 |
| Straits .....               | 121 0 0         |

  

| tin.                        | —             |
|-----------------------------|---------------|
| English, blocks .....       | 120 0 0       |
| Ditto, Bars (in barrels) .. | 121 0 0       |
| Ditto, 2d quality .....     | 1 4 6 1 6 8   |
| Ditto, 2d quality .....     | 1 1 0 1 1 1 0 |
| IC Coke .....               | 1 2 0 1 2 6   |
| Ditto .....                 | 1 8 0 1 8 6   |
| Canada plates .....         | 12 10 0 13 0  |
| In London .....             | 6 12 6 6 15 0 |

**REMARKS.**—The news of the satisfactory adjustment of our late American difficulty has caused our market to assume a more buoyant tone, and in some metals considerably enhanced prices have been the immediate result. Holders who during the last week or two have been ready sellers, are now extremely firm, and but little anxiety is manifested to make sales. It has before been stated that at the moment of the *Trent* affair becoming known the metal market was steadily improving; the temporary suspension of business which this affair has caused will, it is anticipated, render the present demand greater than before, and cause a rapid advance in the value of nearly all descriptions of metals. In consequence of the comparatively small shipments of the last two years, an increase in our export trade may be pretty confidently reckoned on this year. The further reduction in the Bank rate of discount will tend to encourage speculation, so that, on the whole, we may look for a good spring trade.

**COPPER.**—The actual position of the market for English descriptions is hardly ascertained, as but few new orders have been given out. Holders of second-hand lots are, however, less inclined to make any considerable sacrifice in order to force sales, preferring to wait in expectation of a better demand as the season advances. No alteration in fixed rates has taken place. For foreign there is already more enquiry.—Burra Burra is now quoted 10d. to 10½d.; Kapunda, 10d.; Spanish, 9d.; Chili, 9d., in Liverpool. Yellow metal remains without activity.

**IRON.**—No improvement is visible in the demand for railway bars, and the quotations continue without alteration—5d. f.o.b. in Wales. Merchant bars in quiet request at 5d. 2s. 6d. at the works, and 5d. 17s. 6d. delivered free on board in London. Staffordshire makes have undergone but slight alteration; there is, perhaps, a little more doing in sheets, but not sufficient to cause any amount of activity in the trade. Swedish bars, good Indian specifications, are quoted 11d. 10s. ex ship for arrival, and about the same price is asked for spring shipment. There is but a limited enquiry, though the stock is reduced considerably below the average. Scotch pigs have not materially altered in price, mixed numbers still quoted 4d. 3d.

**LEAD.**—Shippers have been lately holding back their purchases on account of the heavy rates of insurance against war risk, but now that ordinary rates will again rule at Lloyd's, an increased demand for shipment will, no doubt, supervene. American orders will again come into our market as soon as the prohibition shall be removed from shipments to that country, and when outstanding contracts are cleared off much higher prices are anticipated, already an advance of 5s. per ton has occurred in English pig, ordinary soft quality now quoted 20d. 5s. In Newcastle a rise of 20s. per ton has taken place. Sheets and bars are rather more in request. Other kinds continue quiet. Spanish pig, 19d. 10s.

**SPELTER.**—Owing to the speculative character of this metal the peaceful solution of the American question has thus early exercised a beneficial influence on prices, which have advanced about 20s. per ton beyond last week's quotations. The present price is 18d. 10s. in warehouse. Several large sales for spring shipment have been made at improved rates. The stock here is heavy, about 6000 tons. Zinc remains steady at 24d.

**TIN.**—A rise in the fixed price of English is talked of, but smelters do not as yet refuse to execute orders at the quoted rates, as the demand is at present only of a limited character. Foreign has been favourably acted on by the peace news. Banca is now held for 12d. The price in Holland has advanced to 7d. 10s., equal at the present rate of exchange to about 12d. 10s. to 12d. 15s. here. Fine Straits, which has been sold during the week as low as 11d., is now held for 12d., and upwards, and only a limited quantity to be purchased at this price, sellers are mostly looking for much higher rates.

**TIN-PLATES.**—A large accession of American orders is expected, and

the price of IC coke has risen about 6d. per box in anticipation thereof. Advices from New York speak of a considerable advance in quotations there, and greatly diminished stocks. Only a limited enquiry exists at present in our market.

**STEEL.**—Manufacturers of English are tolerably well supplied with Government work, and large orders for crinoline steel for France also tend to keep the trade pretty brisk. Foreign continues steadily to improve; Swedish keg is now quoted 16d. to 16d. 10s. ex ship and for arrival. There is only a very small quantity in stock. Faggot 17d. 10s. A large business both in keg and faggot has been done for spring shipment.

**LIVERPOOL, JAN 8.**—The Iron Trade, in 1861, probably suffered more from political events in America than any other branch of industry. The breaking out of the civil war, and the imposition of protective duties under the Morrill Tariff, have interfered very seriously with the usual demand from that market. More recently, also, the fear of hostilities between Great Britain and the Federal States, arising out of the unlawful seizure of the Southern Commissioners on board the British mail-steamer *Trent*, aggravated the existing depression, and caused the American houses to abstain almost entirely from operations. The exports show 93,000 tons less in 1860; but as the falling off to the United States is 98,000 tons, it results that increased shipments have been made to other markets to the extent of 5000 tons. Notwithstanding the diminution in the demand for manufactured iron, it is gratifying to observe that prices have maintained a remarkably steady position, and exhibit a decline of from 10s. to 12s. 6d. per ton only upon the rates current at the commencement of the year. Scotch Pig-iron has been very free from fluctuations, and closed about 5s. per ton less than the price ruling a year ago. The shipments to America, the stock in Scotland has increased by 75,000 tons. This fact, however, has not had any great effect on the market, and it is pretty certain that with any material improvement in the demand, the

dividend at the rate of 12½ per cent. per annum (free of income tax) was then declared, payable on and after the 6th instant.

The CARYSFORT MINING COMPANY accounts showed for the last half-year an expenditure of about £2000; a balance at the bank of about £600; and assets in Government and other securities of £440. The chief captain's report refers to progressive work which in most instances has not yet reached the points aimed for, and speaks generally in favourably terms of the appearances at Moneyteigue and Ballintemple, where water-course has been extended to the Aughrim river, which will prevent the recurrence of the water-wheel being rendered useless from want of water. A shareholder (Rev. Mr. Woods) made some unfavourable comparisons between the present management and that under their late manager, Captain Silas Evans, and referred to an offer made by Mr. Francis Lisabé, E.C., to give his services as consulting engineer for a certain percentage on profits, being confident of making the undertaking pay. The directors explained that the board dispensed with the former manager for good reasons, and that they visited the mines often than the directors of any similar undertaking do, and that they entertain great hopes of ultimate success. The directors have procured for the company a lease from the Crown of the gold mines on the Carysfort estate; a measure which in a strategic point of view may be considered useful, keeping out troublesome interference by gold-prospecting or other parties.

The CASTLEWARD MINING COMPANY proceedings were not of much public interest. At the close of the previous half-year they had about 30 tons of undressed ore at surface, which have been increased during the last six months by 30 tons. The directors hope that in about four months they may have a cargo of ore, but fear that a call will be necessary before their first ore bill can come to their assistance.

At Redruth Ticketing, on Thursday, 2582 tons of ore were sold, realising 15,679. 1s. The particulars of the sale were—Average standard, 129. 18s.; average produce, 6½; average price per ton, 67. 1s. 6d.; quantity of fine copper, 175 tons 7 cwt. The following are the particulars:

| Date.    | Tons. | Standard. | Produce. | Price per ton. | Ore copper. |
|----------|-------|-----------|----------|----------------|-------------|
| Dec. 12. | 3073  | £12 12 0  | 6½       | £5 9 6         | £88 7 0     |
| " 19.    | 6039  | 135 12 0  | 5½       | 4 11 6         | 88 15 0     |
| " 26.    | 3001  | 132 7 0   | 5½       | 4 16 0         | 84 3 0      |
| Jan. 2.  | 2988  | 128 1 0   | 7        | 6 6 0          | 88 8 0      |
| " 9.     | 2582  | 129 18 0  | 6½       | 6 1 6          | 89 8 0      |

Compared with the sale of last week, the advance has been in the standard 18s., and in the price per ton of ore about 1s. 2d. Compared with the corresponding sale of last month, the decline has been in the standard 15s., and in the price per ton of ore about 1s.

At the Swansea Ticketing, on Tuesday, 1585 tons of ore were sold, realising 26,678. 12s. The particulars of the sale were—Average standard, 104. 10s.; average produce, 18 1-16; price per ton, 167. 16s. 6d.; quantity of fine copper, 286 tons 5 cwt. The following are the particulars of the sales during the past month:

| Date.    | Tons. | Standard. | Produce. | Price per ton. | Ore copper. |
|----------|-------|-----------|----------|----------------|-------------|
| Dec. 10. | 1450  | £117 4 0  | 11 9-16  | £11 5 6        | £97 10 6    |
| " 24.    | 1119  | 109 8 6   | 15½      | 14 4 6         | 95 1 6      |
| Jan. 7.  | 1585  | 104 10 0  | 18 1-16  | 16 16 6        | 93 4 0      |

Compared with last sale the decline has been—in the standard, 2½; and in the price per ton of ore about 7s. 3d. Compared with the corresponding sale of last month, the decline has been—in the standard 4½, and in the price per ton of ore about 1s. 6d. Of the 1585 tons of copper ore sold on Tuesday, 7 tons were from British mines, which gave an average produce of 12½, and sold at an average standard of 106. 8s. = 107. 15s. per ton of ore. The remaining 1578 tons were colonial and foreign ores, which gave an average produce of 18 5-16, and sold at an average standard of 104. 9s. 6d.= 104. 17s. 6d. per ton of ore. On January 21 there will be offered for sale 1317 tons, from Cuba, Knockmahon, Berchaven, Wheal Maria, Turkey, Ockip, Tuscany, and New South Wales.

At South Wheal Frances meeting, on Monday, the accounts for Oct. and Nov. showed a credit balance of 2423. 11s. 7d. The profit on the two months was 496. 11s. per share was declared, and 1927. 11s. 7d. carried to credit of next account.

At East Caradon Mine meeting, on Wednesday, the accounts for the three months ending December showed—Balance last audit, 1870. 1s. 4d.; ore sold, 237. 10s. 7d. = 8427. 11s. 11d.—Mine cost, merchants' bills, sundries, 2302. 17s. 4d.; leaving credit balance, 6124. 14s. 7d. A dividend of 4608. 11s. per share was declared, and 1516. 14s. 7d. carried to credit of next account. Details in another column.

At the Cook's Kitchen Mine meeting, on Tuesday, the accounts showed a credit balance of 941. 17s. 4d., and a dividend of 7s. per share was declared. The details appear in another column.

At the Marke Valley Mine meeting, on Wednesday, the accounts for the three months ending November showed—Balance last audit, 3780. 1s. 4d.; ore sold, 550. 10s. 7d. = 7672. 1s. 4d.—Mine cost, 2882. 17s. 2d.; lord's debts and sundries, 560. 5s. 7d.; dividends paid, 2321. 5s.; leaving credit balance, 4007. 13s. 7d. A dividend of 2000. 1s. per share was declared. As the November ore realised 1694. 8s. 2d., there remains, after payment of this dividend, 2890. 15s. 9d. to credit of the next account. Details in another column.

At New Wheal Seton meeting, on Dec. 31, the accounts for four months ending October showed a debit balance of 2181. 13s. 11d., and a call of 30s. per share was made. The shaft is down 7½ fathoms under the 42, where they have a promising ledge; the other levels are looking very encouraging. Surrounded by good mines, there is little room to doubt of this becoming equally productive when fully developed.

At Llywernog Mine meeting, on Wednesday (Mr. James Rhodes in the chair), the accounts, as shown in last week's Journal, were adopted. There remains 40000 of the nominal capital uncalled. A call of 4s. per share was made.

At East Wheal Golden meeting, on Dec. 31, the accounts showed a debit balance of 1377. 6s. 3d. A call of 10s. per share was made. The lead ore sold amounted to 99t. The agents expect to return 120t. of lead ore in the next quarter. The 30th had presented a very promising appearance, and they had no doubt that there would be a good and lasting mine.

At the Wheal Bassett and Grylls meeting, for the three months ending October, the accounts showed—Ore sold, Oct., 643. 11s. 8d.; Nov., 351. 4s.; Dec., 300. 10s. 3d.; extra price for tin sold, 30. 18s. 14s. 6d.—Call received, 782. 11s. 8d. = 3920. 10s. 5d.—Balance last audit, 17. 9s. 6d.—Mine cost, merchants' bills, sundries, 565. 1s. 10d.; lord's debts and sundries, 560. 5s. 7d.; leaving credit balance, 867. 16s. 6d. The profit on the quarter's working was 169. 11s. 7d. Capt. Wilkin's salary was fixed at 12 guineas per month. It was resolved that the arrangement made by the deputation (appointed at the meeting of adventurers) with the several lords for the reservation of 1-20th due in the several settlements to be received during pleasure—be approved and confirmed; and that the grants be authorised and requested to execute the several counterparts of the sets. The report of the agents (Cpts. J. B. Wilkin, W. Harris, and S. Tredinnick) stated that the total number of hands employed was 318, out of which there were 75 men on tutwork, and 80 tributes. Upon the whole, the mine was in a fair way of developing itself; and they hoped when the eastern part of the mine became productive to return profits.

At Redmoor Mine meeting, on Wednesday (Mr. E. Fitzgerald in the chair), the accounts for the three months ending Nov. showed—Balance last audit, 347. 11s. 11d.; calls received, 347. 11s. 11d.; tin ore sold, 332. 4s. Id. = 853. 17s. 4d.—Mine cost, merchants' bills, and sundries, 660. 7s. 6d.; leaving credit balance, 163. 10s. 10d. The balance of liabilities over assets was 477. 1s. 11d. A call of 6d. per share was made. Capt. Thos. Taylor reported that they were now sending off 80t. or 100t. worth of arsenical soot, and have on floors about 4 tons of tin.

At West Wheal Frances meeting, on Dec. 30, the accounts for the four months ending Oct. showed—Balance last audit, 572. 3s.; mine cost, 722. 19s. 9d.; merchants' bills, 653. 1s. 9d. = 1948. 7s. 6d.—Calls received, 782. 11s. 8d. = 3920. 10s. 5d.—Balance last audit, 17. 9s. 6d.—Mine cost, 2062.; merchants' bills and sundries, 263. 1s. 10d.; leaving debit balance, 469. 1s. 9d. A call of 6d. per share was made. Capts. C. Thomas and J. Mayne reported upon the various points of operation at the mine.

At Clark United Mine meeting, on Wednesday, the accounts will show that the company have cash and ore bills in hand, 2402. 9s. 6d.; to meet bills payable, the shareholders upon the mine nearly paying working cost, and anticipates a profit at next account. Regarding uncalled nominal capital (3000l.) as an asset, the assets exceed liabilities by 2576. 12s. 4d.

At Wheal Hartley meeting, on Monday, the accounts for the five months ending November showed—Mine cost, 2062.; merchants' bills and sundries, 263. 1s. 10d.; leaving debit balance, 3677. A call of 12s. 6d. per share was made. It is proposed to obtain a grant of the Trevaskis seat, adjoining.

At West Wendron Consols meeting, on Tuesday (Mr. F. Combs in the chair), the accounts showed a debit balance of 77. 7s. 6d. A call of 2s. 6d. per share was made. Capt. R. Kendall reported that at certain work which he recommended were done, he believed that in about six months they will have a good mine.

At the United Mines (Tavistock) meeting, on Thursday, the accounts showed a debit balance of 450. A call of 2s. per share was made.

At the Vale of Towy Mine meeting, yesterday (Mr. Harris in the chair), the accounts for the quarter ending October showed a balance against the mine of 2582. The chairman said that everything was charged to date. He need not mention that, from the price of lead, they had sustained loss beyond that arising from the decreased value of what had been made during the quarter; in fact, they calculated the loss during the three months to be something like 3500. But notwithstanding that, the committee had sufficient assets without making a call. He might also mention that there had been an unusually paid for income tax a sum of about 1400, which the committee had no doubt would be recovered; so that, in point of fact, they might reckon the actual debit balance about 1000. In answer to questions Mr. Field (the secretary) stated that the new well, which was in course of exploration to reach a deposit of lead which had been worked some hundred years ago by means of a shallow adit on the south side of the hill, had been driven about 66 fathoms, and that it was expected they would have to drive about 10 fathoms further to reach the deposit. The ledges at the present time was about 6 or 8 feet wide, composed of sulphate of barium. Captain Waters was very sanguine that his exploration would open out an entirely new mine, totally independent from the old workings. Mr. McCalan enquired whether the committee were satisfied that the financial condition of the company did not necessitate the making of a call. The Chairman replied that the committee had fully considered that matter, and they saw their way clear to continue the operations, at present, without making a call. Mr. Edwards enquired what was the committee's opinion with respect to the prospects of the mine?

The Chairman replied that at present they were only down to the 100 fathom level, and, according to the report of Messrs. Phillips and Darlington (of which each shareholder had a copy), they could not expect any definite result till the 120 fathom level was reached. But they had good reason to hope that during the coming quarter a considerable change for the better might be anticipated. The report and the accounts having been received and adopted, a vote of thanks to the Chairman was passed, when the proceedings terminated.

At Praed Consols Mine meeting, on Dec. 30, the accounts showed—

Balances last audit, 632. 0s. 9d.; mine cost, Aug., 857. 14s. 11d.; Sept., 871. 12s. 8d.; Oct., 941. 14s. 2d.; Nov., 861. 15s. 6d.; bank interest and commission, 71. 15s. 11d.; merchants' bills, 166. 13s. 8d. = 1161. 7s. 5d.—Calls, 632. 0s. 9d.; leaving debit balance, 529. 6s. 11d. A call of 11s. 2d. per share was made. The purser was authorised to take proceedings in the Stannaries Court against all shareholders in arrear of call (made previous to this day), unless the same be paid within 14 days from the present date. The report from Capt. R. Stevens stated that the lode could not, he thought, fail to put the mine in a paying state when opened out at deeper levels, and that it could be developed for a small outlay, as all the plant necessary was on the mine.

At Wheal Creborth meeting, on Thursday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts showed a debit balance of 97. 6s. 4d. A call of 1s. 6d. per share was made. Details appear in another column.

At the East Providence Mines meeting, on Dec. 30, the accounts for the three months ending Oct. showed—Call, 780. 6s. 9d.; tin sold, 801. 2s. 10d. = 860. 9s. 9d.

Balance last audit, 392. 9s. 8d.; mine cost, Aug., 357. 1s. 10d.; postage, stationery, &c., 32. 10d.; merchants' bills, 131. 15s. 6d.; leaving credit balance, 52. 10s. 5d. A call of 2s. 6d. per share was made. Captain Daw, of Carn Brea, Mines, having been called upon especially to inspect this mine, it was resolved that his report be adopted. It recommended the flat-rodded shaft to be sunk 15 fms. below the 30 before commencing to drive another level, and then to push on the sinking and driving with all speed—which had been done ever since the working of this part of the mine was commenced. He had not often seen so much work done in so short a time. Looking at the locality, and that the lodes had produced so much tin to the west of the adit, he saw no reason why they should not be equally as productive to the east, by having the intersections of counter lodes, and the side which made the lode so productive in Providence Mine. He thought East Providence would become a profitable concern when fully developed.

At the Gourock Consols Copper Mining Company first general meeting, held at the offices of Messrs. Fisher and Watts, Glasgow, on Wednesday, the registration deed incorporating the company was laid before the meeting; the allotment of shares to applicants was proceeded with, the bankers, secretary, and executive officers were appointed, and the business terminated with a vote of thanks to the Chairman. The agent from the mine reported that the lead for conveying the water to the wheel was nearly completed, that the wheel was quite ready for fixing, the foundation and frame were being fast proceeded with, and in a short time, if weather permitted, would be in effective operation. Considerable delay had been experienced by circumstances over which the management could by no possibility have control, and such as all mining projects experience at their first being ushered to the public; now, however, the whole of the difficulties have been surmounted, and the company may be said to be fairly launched under more than usually favourable circumstances as the works may be immediately acted on to raise copper and make returns.

At Grangham and St. Aubyn Miners meeting, on Tuesday, the accounts for the three months ending Oct. and Nov. showed—Balance last audit, 1791. 0s. 10d.; mine cost, 643. 6s. 2d.; sundries, 432. 1s. 10d. = 1161. 7s. 5d.—Calls received, 486. 1s.; copper ore sold (deducting 12. 10s. 2d. dues, at 1s.-18th), 212. 1s. 4s.; leaving debit balance, 123. 10s. The loss on the two months' working was 430. 9s. 2d. A call of 1s. per share was made. Application will be made to the lords for the remission of their dues. Capts. J. Davey and J. Mitchell reported that they had not cut the lode in the 25 cross-cut, south of engine-shaft, but hope to do so shortly.

At North Treskerby Mine meeting, on Tuesday, the accounts for the three months ending November showed—Balances last audit, 1218. 1s. 4d.; copper ore and tinstaff sold, 2197. 1s. 9d. = 3435. 3s. 1d.—Mine cost, merchants' bills, and sundries, 2639. 11s. 10d.; leaving credit balance, 775. 11s. 6d. The apparent loss of 422. 10s. arises from three months' cost being charged against two months' ore money. Capts. F. Pryor, Hosking, and Kitto reported they were laying open the mine very fast, and their discoveries are equal to their samplings.

At the West Rose Down meeting, on Wednesday, the accounts for the three months ending November showed—Mine cost, 732. 1s. 3d.; sundries, 22. 10s. 10d. = 734. 10s. 1d.—Balance last audit, 713. 10s. 4d.; bank interest, 77. 19s.; leaving debit balance, 132. 10s. 10d. A call of 1s. per share was made. Application will be made to the lords for the remission of their dues. Capts. J. Davey and J. Mitchell reported that they had not cut the lode in the 25 cross-cut, south of engine-shaft, but hope to do so shortly.

At the Port Phillip and Colonial Gold Mining Company meeting, on Wednesday (Mr. J. D. Powles in the chair), the accounts showed a balance standing to the credit of profit and loss of 24,780. 1s., out of which a dividend of 1s. 6d. per share was made (forming with the distribution of 1s. per share declared in July last, the fourth dividend), and being at the rate of 12½ per cent. per annum. A vote of 5000l. was passed to the three original directors—Messrs. J. D. Powles, Sir C. H. J. Rich, and Captain J. Vetch, R.E.—in consideration of their gratuitous services from 1852 to 1858. The remaining 12,000l. will be offered for sale at 1s. per share.

At the brigantine *Croake*, with a full cargo of 157 tons of copper ore, arrived yesterday at Swansea, bringing advices from the Terra Nova Copper Mine (see the Journal of Nov. 30) to Nov. 25. She left 20 tons of first and 25 tons of second quality ore at the mine, being full laden; and for burage took in 183 spruce spars, and 211 sticks of birch. She also brought one 7 cwt. block of copper for the exhibition of May next. The main shaft had been sunk 20 feet into the solid rock without any appearance of walls on either sides or ends; the ore showing a solid compact body, and steadily improving in quality, the last fathoms having raised the general average another 3 per cent. for copper: the shaft sinking yields about 30 tons of ore per cubic fathom. This promising mine is now leased to and worked by the St. John's United Copper and Lead Mining Company, in conjunction with private parties in Newfoundland.

At the British Consols Copper Mining Company meeting, on Wednesday (Mr. F. Powles

## THE AMMAN (ABERDARE) COLLIERY COMPANY

(LIMITED).

Incorporated under the Joint-Stock Companies Acts, 1856 and 1857, whereby the liability of shareholders is limited to the amount of their shares.  
Capital £100,000, in 10,000 shares of £10 each.  
Deposit, £1 per share on application.

DIRECTORS.

The Right Hon. the EARL OF KINTORE, Lord Lieutenant of Kincardineshire.  
GEORGE BROCKELBANK, Esq., Greenwich (Director of the General Steam Navigation Company).  
EWING P. COLQUHOUN, Esq. (Messrs. Colquhoun and Thomson), Laurence Pountney-hill.  
CHARLES LEAN, Esq., Llantrisant, late of the Cwm Avon Ironworks.  
WILLIAM LLOYD, Esq., J.P., Newtown, Montgomery (Director of the Oswestry and Newtown, Llandudno, and Mid Wales Railway Companies).  
GEORGE OFFOR, Esq. (Messrs. Seymour, Peacock, and Co.), London and Liverpool.  
JOHN E. PANTER, Esq., Lee Park, Blackheath.  
Sir EDWIN PEARSON, F.R.S., Wimbleton, Surrey (Director of the Scottish Australian Investment Company).  
JAMES LEWIS ROBERTS, Esq., J.P., Gadijs, Aberdare, Glamorganshire.  
JOSEPH TILSTON, Esq., Lower Kensington-grove.  
Major-General W. G. WHITE, 14, St. James's-square.  
AUDITOR—George H. Jay, Esq. (Messrs. Quilter, Ball, Jay, and Co.), Moorgate-street.  
SOLICITORS—Messrs. Johnson, Farquhar, and Leech, London; Messrs. Brothier and Fox, Newport, Monmouthshire.  
BANKERS—London and Westminster Bank, Lombardy; West of England and south Wales Bank, Cardiff and Aberdare.  
BROKERS—Messrs. Field, Son, and Wood, 7, Warnford-court; Philip Wooley, Esq., 26, Tokenhouse-yard.  
SECRETARY—Francis Hawkins, Esq.

This company is formed for the purpose of working important colliery properties, containing upwards of 2000 workable acres of the finest steam coal in the world, situated in the valley of Aberdare, Glamorganshire. The peculiar advantages distinguishing this undertaking have been noticed by almost the entire London and provincial press, and may be briefly enumerated as follows:—

1.—The quality of the coal is unsurpassed. It is *soot* burning and smokeless. It is on the English Admiralty and French Marine lists, and can be worked with the greatest economy.

2.—The quantity of workable coal, as estimated by the surveyors, Messrs. Charles Lean, D. Llewellyn, and G. C. Greenhill, is upwards of 10,000 tons per acre, amounting in the aggregate to between 8,000,000 and 9,000,000 tons, equal to a delivery of 500 tons a day for more than half a century.

3.—The arrangements of the colliery are complete, being superior to almost any colliery in the district. The whole establishment is on a substantial scale. It is now in full work, capable of producing 450 tons a day, which, by a moderate outlay, will be increased to 800 tons per day. There is no water to contend with, and no pumping required.

4.—The demand for the coal is most extensive, the directors having before them offers of large contracts, including one from a highly respectable firm, to take the entire produce of the colliery from the pit's mouth for the next five years.

5.—As an investment, we undertake offers unusual advantages, as it is not in any way a matter of speculation; and the profits, which are estimated at from 20 to 30 per cent., commence from the moment the company acquires possession.

Application for shares must be accompanied with a banker's receipt for £1 per share in part payment of £2 10s., the balance of which will have to be paid on allotment. If no allotment be made, the deposit will be returned without deduction.

Prospectuses, surveyor's reports, and forms of application, may be obtained from the brokers, Messrs. FIELD, SON, AND WOOD, 7, Warnford-court, and PHILIP WOOLEY, Esq., 26, Tokenhouse-yard; or from the secretary, FRANCIS HAWKINS, Esq., at the temporary offices of the company, 15, Tokenhouse-yard, London, E.C.

## THE CARDIGANSHIRE CONSOLIDATED MINING COMPANY (LIMITED).

Increase of nominal capital to £50,000. In 10,000 shares of £5 each.

The shareholders will not be liable beyond the amount of their respective subscriptions. £5 per share to be paid with application, and 15s. per share on allotment.

DIRECTORS.

CHARLES COPLAND, Esq. (Messrs. Copland and Co.), Bury-street, St. Mary Axe.

JOHN KILNER, Esq., Bury St. Edmunds.

PARKIE PITTRAR, Esq. (Messrs. P. Pittar and Co.), 26, Gresham-street.

PERCY MARSH SHARP, Esq. (Messrs. Hancock, Sharp, and Hales), 20, Tokenhouse-yard (With power to add one more).

SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard.

CONSULTING MINING ENGINEERS—Messrs. Phillips and Darlington, 26, Gresham-street.

BANKERS—London and Westminster Bank, Lombardy.

AUDITOR—Charles Eley, Jun., Esq., 27, Great George-street, Westminster.

LONDON MANAGER, AND OFFICES—J. H. Murchison, Esq., No. 117, Bishopsgate-street Within.

BROKERS.

London ..... Messrs. Alexander and Lindow, 21, Tokenhouse-yard.

Manchester ..... James Gordon, Esq., Newmarket Chambers.

Aberdeen ..... H. C. Oswald, Esq., Marischall-street.

Exeter ..... Mr. John Harris.

Dublin ..... Messrs. Smyth and Du Bédat, 11, College Green.

## ABRIDGED PROSPECTUS.

This company holds the celebrated lead and copper mines known as Esgair-hir and Esgair-fraith, situated in the rich mineral district of Cardiganshire, and which many years ago made enormous returns.

These mines are also on the same lode as the Dyllyne Mine, for which Mr. Bright, M.P., and his friends, gave £24,000, and having laid out £10,000 more in explorations, &c., their returns are now upwards of 200 tons of lead ore per month, which it is believed give a profit of about £1000 per month. The Cardigan Consols Mines are yet only 60 fms. from surface, and the seat extends two miles on the course of the lodes.

Messrs. Phillips and Darlington state that if adequate capital is provided, they are of opinion that the Cardigan Consols Mines offer more than average security for the money so employed."

The managing agents of the Dyllyne and the Dyngwyn Mines (both making profits), speaking from "experience of 30 and 20 years in a similar stratum," and "now carrying on works of the same magnitude on the very same lode," consider that, if properly worked, Cardigan Consols Mine will become "one of the first in the kingdom."

The Welsh lead mines have been famous for centuries for their immense productive-ness and profits. Many of them have been, and are still, carried on as private under-takings; but the following may be given as the results of some of the successful mines that are now at work, where adequate capital has been provided to carry them out; though, with the exception of Minera, Cardigan Consols Mines are likely to greatly exceed the results of those named, and be on a much larger scale:—

| No. of shares. | Name of mine. | Amount paid-up per share. | Present price per share. | Dividends paid per share. |
|----------------|---------------|---------------------------|--------------------------|---------------------------|
| 857            | Cwm Erin      | £ 7 10 0                  | £ 21 0 0                 | £ 6 15 0                  |
| 128            | Cwmystwyth    | 60 0 0                    | 200 0 0                  | 227 10 0                  |
| 300            | East Darren   | 32 0 0                    | 50 0 0                   | 77 10 0                   |
| 400            | Lisburne      | 18 15 0                   | 110 0 0                  | 377 10 0                  |
| 1800           | Minera        | 25 0 0                    | 180 0 0                  | 75 0 0                    |

Applications for shares, in the form annexed to the prospectus, accompanied by a deposit of 5s. per share, may be addressed to the directors, or to the brokers. On allotment, 15s. per share additional will have to be paid, but if no shares are allotted the deposit will be returned.

Detailed prospectuses, with the reports, and forms of application for shares, may be obtained at the office, 117, Bishopsgate-street Within, E.C., or from any of the brokers. The prospectus will also be found at length in the *Times*, *Daily News*, *Morning Post*, *Economist*, *Mining Journal*, and *Limited Liability Journal*, of 30th November, 1861.

## ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED), IN THE PARISH OF ST. JUST, NEAR PENZANCE, IN THE COUNTY OF CORNWALL.

Incorporated under the Joint Stock Companies Acts, 1856 and 1857.

Capital £15,000, in 6000 shares of £2 10s. each. Deposit on application 5s., and 5s. on allotment.

DIRECTORS.

JAMES WRIGHT, Esq., C.E., 42, New Bridge-street, Blackfriars, London.

COL. BUSH, 55, York-terrace, Regent's-park, London.

THOMAS COOPER SMITH, Esq., 5, Warnford-court, Throgmorton-street, London.

CAPT. GOLDMUGHT (late 60th Rifles), Barton Villas, Barnsbury, London.

WESTWORTH LASCELLES SCOTT, Esq., M.S.A., Westbourne-park Baywater, London.

WILLIAM GREEN, Esq., Bovary-road, Hull, Yorkshire.

GEORGE EUSTICE, Esq., C.E., Hayle, Cornwall.

BANKERS—Robert Lubbock, and Co., 11, Mansion House-street, London.

BROKER—Alexander Young, Esq., 3, Bartholomew-lane, or Stock Exchange, City, London.

SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard, City, London.

AUDITORS—Messrs. Cooper Brothers and Co., 13, George-street, Mansion House, London.

MANAGING DIRECTOR—Mr. Thomas Cooper Smith.

OFFICES,—5, WARNFORD COURT, THROGMORTON STREET, LONDON.

This company is established for purchasing and working the extensive and valuable tin and copper mines, called the St. Just United, in the parish of St. Just, near Penzance, Cornwall, and situated in a district which is one of the most productive in the county, and has become distinguished by the rich returns and profitable results of mining operations carried on within it.

These mines lie immediately adjacent to the rich Botallack, Levant, and other mines, all making large dividends, and producing tin in the granite inland, and copper ore in the kilns under the sea.

The company having been completely registered with Limited Liability, no shareholder can, under any circumstances whatever, be made responsible for a greater amount than the shares to which he subscribes.

A considerable portion of the capital has been already subscribed, and the directors will proceed to allot the shares in a short time.

Prospectuses, plans, forms of application for shares, and any other information, may be obtained of the managing director, at the offices of the company, or from ALEXANDER YOUNG, Esq., Stock Exchange, London.

## ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED).—MR. THOS. COOPER SMITH having ACCEPTED the MANAGEMENT of this COMPANY, all future applications must be made to him, at the new offices, 5, Warnford-court, Throgmorton-street, London.

TO CAPITALISTS.—MESSRS. LEICESTER AND CO., INSPECTORS AND VALUERS OF MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES TO SELECT AND INVEST CAPITAL IN MINING PROPERTIES, for which they charge 2½ per cent.; and they also COLLECT AND TRANSMIT THE DIVIDENDS, charging 45 per cent. on their amount. Messrs. LEICESTER and CO. earnestly call the attention of capitalists to the many opportunities they possess of investing, to pay from £50 to £150 per cent. per annum. Sums under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDELEY, Mining Journal office, 26, Fleet-street, London; or direct through our bankers the UNION BANK OF AUSTRALIA.

## THE PROGRESS OF MINING IN 1861,

BEING THE EIGHTEENTH ANNUAL REVIEW.

BY J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The SEVENTEEN ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 29, 1860, and January 5, 1861.

A FEW COPIES of the REVIEW of 1855, containing Statistics of the Metal Trade and the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at MESSRS. WATSON AND CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

Now ready, price Is.,

Composition of the original views.

Iron ..... 95·412 ..... 79·960

Carbon ..... 2·900 ..... 11·020

Nitrogen ..... 0·790 ..... 2·590

Silicium ..... 0·478 ..... 6·070

Phosphorus ..... 0·152 ..... 0·059

Sulphur ..... 0·179 ..... 0·096

Lost ..... 0·108=100·000 ..... 0·205=100·000

Composition of the carbonaceous substance.

At the year's end, Dr. Calvert's discovery has been referred to in a manner which would induce the opinion that his researches are nothing more than a repetition of those described in a paper "On Black Lead from Cast-Iron," of Dr. J. Macculloch, communicated to the "Edinburgh Philosophical Journal" in 1822, we may take this opportunity of stating that the experiments of the two chemists were not similar, and that the results obtained are directly opposed to each other: Macculloch maintained that plumbago is a distinct metal, and that black lead is its oxide, whilst Calvert proves that plumbago (or rather which Macculloch calls plumbago) is a compound of iron; being, in fact, a compound of about 91 per cent. of a carbide of iron, with about 8½ per cent. of a nitride of silicon, and traces of phosphorus and sulphur. Macculloch added little to that which was previously generally known on the subject; but Calvert has carried out his researches with such care and minuteness that we trust ere long to be enabled to give a final reliable opinion upon the subject. In the paper referred to Dr. Macculloch describes certain experiments which he had made in consequence of his attention having been drawn to specimens of iron that had lain for years at the bottom of the sea, or had been subject to constant soaking in the porter-backs used at breweries. He notices the fact that certain iron guns, fished up in 1740 off Tobermory, from one of the sunken vessels of the Spanish Armada, had become so soft that they could be easily scraped, and that wherever scraped the surface of the metal grew too hot to be touched with the hand. A similar phenomenon was observed in some of the iron fittings that had been long exposed to the weak acid present in porter; the metal, moreover, had all the appearance of plumbago, and was not reduced in bulk. The Doctor tested his conclusions by experiments in the laboratory, and found that he could produce plumbago and black lead at pleasure, without any diminution in bulk of the pieces of iron experimented on; and that the converted metal always became hot if scraped, while any moisture remained, as had been remarked of the long-submerged cannon. In describing his experiments on the soaking of pieces of iron, he mentions that, to procure the black lead in perfection, the acid should be very weak, and the operation is then necessarily tedious. Acetous acid appears to be the best, and it is by this that it is produced in porter-backs, in the waste-pipes of breweries, and in calico-printing houses, where sour paste is used. If the experiment be perfect, the black lead becomes hot on exposure to air, smoking while there is any moisture to be evaporated, particularly when the surfaces are scraped off in succession, so as to give access to the air. Macculloch would thus appear to have proceeded little further than the point at which Calvert commences, for if we assume the contrary to be the case, we could only come to the conclusion that to express the opinion, as the result of his researches, that the carbonaceous substance found in cast-iron was a distinct metal, Macculloch must have been a very clumsy manipulator, and a chemist upon whom no reliance could be placed.

After concluding his experiments, Dr. Calvert published a paper "On the Discovery of Carbonaceous Substance in Cast-Iron," in the *Quarterly Journal of Science*, Vol. II., No. 1, 1861, in which he claims that he has discovered a new element, which he calls "Calverite." This discovery has been received with great interest, and has been extensively discussed in the *Quarterly Journal of Science*, Vol. II., No. 2, 1861, and in the *Philosophical Magazine*, Vol. III., No. 1, 1861, and in the *Journal of the Royal Society*, Vol. 33, 1861, and in the *Philosophical Transactions*, Vol. 151, 1861, and in the *Proceedings of the Royal Society*, Vol. 151, 1861, and in the *Philosophical Magazine*, Vol. III., No. 2, 1861, and in the *Journal of the Royal Society*, Vol. 33, 1861, and in the *Philosophical Transactions*, Vol. 151, 1861, and in the *Philosophical Magazine*, Vol. III., No. 3, 1861, and in the *Journal of the Royal Society*, Vol. 33, 1861, and in the *Philosophical Transactions</*

15,000,000. paid annually in wages for raising coal in this country. Surely any trade paying that amount of wages must be regarded as an important one; and it cannot but be looked upon as one of the many important things that coal does, thus to provide for the daily wants of so many of our industrious poor. As to its effects upon trade and commerce, the lecturer remarks that nearly all our large towns are built near coal fields, and chiefly depend for their commercial prosperity on their abundant supply of coal. London is almost the only exception to this rule; and yet that is no exception, for being built on the Thames it is able to command a constant supply. Just to illustrate the effect of coal upon commerce, he remarks that our iron trade now consumes about 15,000,000 tons of coal annually. It takes nearly 5 tons of coal to make 1 ton of iron.

## GEOLOGISTS' ASSOCIATION.

At the meeting of this association, on Monday evening, being the first in the year, the installation of the President formed an important item in the business. For more than two years the chair has been ably filled by the Rev. Thomas Willsire, M.A., who is entitled to the greatest praise for the energy he has displayed in promoting the success of the society. The choice has now fallen upon Prof. James Tennant, the lecturer on Mineralogy and Geology at King's College, London; and from his acceptance of the office it may be very reasonably anticipated that the progress of the association will continue uninterrupted. Upon his retirement from the chair the cordial thanks of the meeting were tendered to the Rev. Mr. Willsire, who, in acknowledging the compliment, remarked that it was highly gratifying to him to find that his efforts in the cause of the association were considered worthy of such recognition. He was one of its earliest members, and had ever done his utmost to promote its welfare. It could not be disguised that in its earlier existence there was some dissension—there was a difference of opinion as to what the association ought to be. Too many wished to make it a rival of the Geological Society, or even to supersede it altogether; he had endeavoured during the rather more than two years he had had the honour of presiding to make it occupy its proper place; to make it, not the rival of the Geological Society, but a society of learners,—of those who did not aspire to be classed with the masters of the science, but who were, nevertheless, desirous of obtaining such a knowledge of geology as should be at once interesting and useful to them. The feeling of the association towards him had always been so kind that he was sure, had he desired it, he would have been re-elected its President, but he thought, had he continued longer in office, it might have been imagined that he was the Geologists' Association; he, therefore, recommended Prof. Tennant for the office. But it must not be considered that this was the sole reason for his recommendation. He believed that Prof. Tennant was one who, from his position, would be able to do more for the association than he had done, and one who, moreover, would use his influence to secure its success.

After complimentary votes to the officers of the association for their past services, Prof. Tennant read an interesting paper "On Limes and Limestones." The professor explained that the paper must be considered as a continuation of that on silice, read upon a former occasion. After describing the conditions in which lime was found, he said that during the last 20 years there had been comparatively little thought of mineralogy, though much attention had been given to geology, which, however, could not be properly studied without an adequate knowledge of mineralogy, and crystallography must be regarded as the first step towards making mineralogy an exact science. It was crystallography which enabled Wellington to distinguish magnesian limestone from pure carbonate of lime, which had previously been confounded with each other. Upon measuring the angles of a mineral supposed at first to be the pure carbonate of lime, Wellington found that the measurement did not correspond, and correctly presumed that it was carbonate of lime. The beautiful stalactites with which most of them were familiar was another form of carbonate of lime, and when broken gave the same angles as calcareous stone, as did the stalagmite which was found on the floor of the caverns. He had brought for their inspection a piece of wooden pine upon which the deposit of lime had been so beautifully called petrified wood, but they should remember that it was simply a deposit of carbonate of lime upon the wood, the wood itself not being changed. Referring to the limestone of the oolithic series, he remarked that in this country we were accustomed to think of them as white substances, but that this was not an unalterable characteristic, and he might refer them to one striking example of this—a deposit of nearly black chalk in the neighbourhood of Dresden. It was particularly interesting, as giving an evidence of the changes which the same mineral underwent in different parts of the globe, and of the effects which varying circumstances had upon its appearance and condition. He felt that he had but imperfectly treated the subject of limestones, which contained a large field for observation and research, but treated it had said enough to impress them with its importance, and to afford them some guide.

A very instructive discussion, in which Mears, Smith, Creasy, and Tomlinson, Prof. Morris, V.P.G.S., and others, took part, followed the reading of the paper, the remarks of Prof. Morris being, as might have been expected, of an especially valuable character. They might regard them as monotonous, but they might consider their chemical composition, or they might look at them with regard to their geological disposition. Taking them from the latter, he at once observed that Mr. Tennant had not adverted to the limestone of much of the Silurian formation and of the Devonian; yet he thought that, at least with regard to the limestones of the Devonian series, much might be said about it which would be highly interesting to the association. For example, in the neighbourhood of Plymouth and Torquay there are limestones which were employed not only for lime-burning, but for ornamental purposes. Indeed, many of the Devonian limestones were of high ornamental and practical use. Some of the best limestones of this formation which he had met with were in the Pyrenees, where they were found highly indurated and compact, the preparation of them for the English and American markets giving employment to a large number of persons in the locality. In them the goniophiles of the Palaeozoic period were very plentiful, as they also were in the Devonian limestones of Eddystone and Bavaria. Again, in the valley of the Saar, near Saarfeld, there occurred the same limestone formation as that of the Pyrenees, and there were many other localities in which its existence might be pointed out. There was the Wealden limestone, too, of the upper portion of the Oolitic series, which was alike interesting in an architectural and in an antiquarian point of view; and much might be said upon the Purbeck stone, which was a very useful material, and had also been much used as an ornamental stone in the earlier ecclesiastical edifices. Allusion was then made to the Nummulitic limestone, a member of the lower Tertiary strata, which in this country, as at Bracklesham, consisted of incoherent sandy clays; in the Paris Basin it was more compact, but in the South of Europe formed a kind of marble, and extended for a great distance from the Pyrenees to Egypt, and even to India. The Pyramids being constructed of the Nummulitic limestone. A former speaker, Mr. Creasy, he thought, had directed the attention of the geological tourist to the examination of the stones of which the ecclesiastical edifices in the locality they might be in were built; to this he would add, that they should also pay attention to the internal decorations, where they would find much to interest them in connection with the limestones. Mr. Tennant had referred to black chalk found in the neighbourhood of Dresden, but as he was quite unacquainted with such a deposit, he would be glad to learn the precise locality. He quite agreed with the view that if practical geologists would look at Nature instead of reading books, the development of the science would be more rapid, and he believed the labours of the Geologists' Association would tend to render the study of Nature, so far as geological subjects were concerned, far more popular. With regard to the cause of the durability of the marbles of the Continent, he would advise all interested, whether as a mason, as an architect, or as a geologist, to consider that it is probable that their deposition the changes which they had undergone had been very various, in some cases merely mechanical alterations, in some chemical alterations, and in some mechanical and chemical alterations combined; he reminded them of these facts, because he believed the study of the formation of the materials was the readiest means of enabling an opinion to be formed with regard to their durability.

In thanking Prof. Morris and the other gentlemen who had taken part in the discussion or the information they had communicated to the meeting, Prof. Tennant remarked upon the easy manner in which Prof. Morris had spoken on the subject, and explained that his omission arose rather from his object having been to confine himself to the limestones of the British Islands, than from any failure to recognise the importance of those to which Prof. Morris had referred. In our own country there were specimens of the practical application of limestones—in the cathedrals of Canterbury, Chichester, Salisbury, &c., &c. The best collections of marbles which could be brought together, but, from the little attention that was paid to them, they had been permitted to get so dirty that they could not be seen, and he one day actually saw a man chopping wood on one of the finest specimens. At the Museum of Practical Geology there was also a fine collection; or, if any album were passing the news-rooms, at 71, Strand, they would find a very beautiful specimen of the Pyrenean marbles which Prof. Morris had been speaking of. They are put up by an agent who was to promote their sale in England, but having spent three-fourths of his money in fitting up his shop, he was compelled to shut it up for want of capital. The professor (Tennant) also alighted to the damage done to limestone structures by the use of iron ties, which oxidised and expanded, splitting the stone in which they were inserted. At the conclusion of Prof. Tennant's reply the usual complimentary vote was given.

**STEEL MANUFACTURE.**—At the Manchester Literary and Philosophical Society, Mr. Brockbank exhibited some samples of steel manufactured by Mr. Bessemer's process. These specimens had been bent and twisted and showed a remarkable degree of ductility. He stated that the bessemer steel was one of the most plastic and manageable of metals—so soft even than copper. It could be bent, flanged, or twisted, either hot or cold, without annealing, and over a considerable range of temperature, which is not the case with ordinary steel or copper. A plate of 18 inches diameter had been forced through a series of dies until it formed a tube 1 ft. long and 13 in. diameter, without any crack or flaw. A ring of steel could at one heat be hammered into a die to form a locomotive engine flywheel top. In drilling a circular hole into a plate, continuous shavings were formed—whereas, in copper, or Low Moor plates, or any other metal, the shavings break into pieces 1-16th in. long. Thin sheets of the Bessemer steel can be bent backwards and forwards hundreds of times without fracturing, and are almost as flexible as paper.

**COATING METALS WITH ALUMINIUM AND ITS ALLOYS.**—Mr. Thomas Bell, of Gateshead, has just specified an invention for effecting the decomposition of the compounds of aluminium (for instance, the double chloride of aluminium and sodium), by the agency of galvanic electricity, and also coating metals, with aluminium, by the same agency. By means of this process, the base of copper (for instance), may be converted into aluminium bronze. The bath is kept melted at a temperature of about 300° Fahr. The negative electrode is composed by the piece of copper or other metal which it is intended to cover or coat in using a composition of carbon and anhydrous alumina. This composition is pressed in a mould of a cylindrical or other suitable form, then calcined in a close furnace, which is disengaged by the action of the electric current. A mixture of alu-

minum and coal tar, moulded and calcined, answers very well. A positive electrode, made from the carbonaceous matter deposited in the interior of gas retorts, may also be employed. When a positive electrode, composed of carbon, mixed or not with alumina, is employed, small pieces of carbon become detached during the operation, and fall into the bath; to remedy this, the electrode may be enclosed within a porous earthen vessel, which is placed in the bath containing the double chloride. The bath, instead of being composed only of the double chloride of aluminium and sodium, may consist of a mixture of this chloride with cryolite, which mixture is fusible at a dull red heat. Cryolite alone may also be used, but it has the inconvenience of melting at a high temperature. A deposit of alumina on copper having been effected, if the piece be heated at a suitable temperature, the alumina and copper combine, and the surface of the piece of metal will be converted into a bronze of aluminium. The patentee claims, "the mode, herein set forth, of effecting the decomposition of the compounds of aluminium, and of coating metals with aluminium or its alloys, and particularly the employment for the above-mentioned purpose of galvanic electricity in the manner above described."

A LIST OF  
ALL THE FURNACES IN AND OUT OF BLAST  
IN THE  
UNITED KINGDOM OF GREAT BRITAIN,  
ARRANGED UNDER THE DIFFERENT DISTRICTS.  
FIRST WEEK IN JANUARY, 1862.

[From Mr. Samuel Griffiths' "Staffordshire Iron Trade Circular"—obligingly corrected by Mr. Griffiths for the *Mining Journal*.]

## WOLVERHAMPTON AND BILSTON DISTRICT.

| Proprietors.                     | Works.              | Furnaces. | In. | Out. |
|----------------------------------|---------------------|-----------|-----|------|
| Addenbrookes, Smith, and Pidcock | Rough Hay           | 3         | 2   | 1    |
| Aston, Isiah, and Co.            | Wolverhampton       | 3         | 1   | 2    |
| Bagnall, John, and Sons          | Caponfield          | 3         | 2   | 1    |
| Baldwin, William, and Co.        | Gold's Green        | 3         | 2   | 1    |
| Banks, Thomas, and Son (late)    | Boverton            | 2         | 0   | 2    |
| Bennett, William, Esq.           | Barber's Field      | 2         | 0   | 2    |
| Blackwell and Co.                | Oldbury             | 4         | 4   | 0    |
| Chilington Company               | Bilston New         | 5         | 0   | 5    |
| Chilington Company               | Cullington          | 4         | 0   | 2    |
| Colbourn, J., and Sons           | Moseley             | 3         | 0   | 2    |
| Creswell, E., and Sons           | Bentley             | 2         | 2   | 0    |
| Davies, Bloomer, and Co.         | Horsley             | 4         | 3   | 1    |
| Fryer, William F., Esq.          | Tipton              | 2         | 2   | 0    |
| Fletcher, Solly, and Urwick      | Pelsall             | 3         | 2   | 1    |
| Gibbons, Benjamin                | Hatheron            | 2         | 1   | 1    |
| Groucott and Sons                | Willenhall          | 3         | 3   | 0    |
| Hopkins, John, and Son           | Bilston Brook       | 3         | 2   | 1    |
| Haines, J. and H.                | Millfields          | 4         | 4   | 0    |
| Hickman, G. H., and A. (late)    | Broadwaters         | 3         | 3   | 0    |
| Jones, David,                    | Dudley Ports        | 2         | 2   | 0    |
| Jones and Murcutt                | Willingsworth       | 3         | 2   | 0    |
| Jones, John                      | Stonefield          | 1         | 0   | 1    |
| Jones, Miles                     | Herbert's Park      | 1         | 0   | 1    |
| Moore, Forsters, and Co.         | Bilston             | 3         | 2   | 1    |
| Morris, Thomas                   | Birchills           | 5         | 2   | 3    |
| Motttram and Deeley (late)       | Wednesbury Old Park | 3         | 3   | 0    |
| Oakley Bed Iron Company          | Darlaston Green     | 3         | 3   | 0    |
| Onions, W. J. and G.             | Park Lane           | 2         | 1   | 1    |
| Parkfield Company                | Toll End            | 2         | 0   | 2    |
| Pemberton, Samuel                | Oster Bed           | 3         | 2   | 1    |
| Perry, F. C. (late)              | Stour Valley        | 2         | 2   | 0    |
| Roberts and Co.                  | Parkfield           | 5         | 4   | 1    |
| Sparrow and Co.                  | Deepfields          | 3         | 0   | 3    |
| Thornycroft, G. B., and Co.      | Roughwood           | 2         | 0   | 2    |
| Thompson, G., and Co.            | Tipton Green        | 4         | 3   | 1    |
| Turley, J. and T.                | Stow Heath          | 2         | 2   | 0    |
| Williams, P., and Sons           | Bradley New         | 2         | 2   | 0    |
| Williams, Brothers               | Crook Hay           | 4         | 0   | 4    |
| Ward, William, and Sons          | Cosley              | 2         | 2   | 0    |
| Ward, William, and Sons          | Welshesbury Oak     | 3         | 2   | 1    |
| Whitehouse, H. B., and Sons      | Union West Bromwich | 3         | 2   | 1    |
| Whitehouse, H. B., and Sons      | Birchills           | 2         | 0   | 2    |
| Whitehouse, H. B., and Sons      | Priestfields        | 3         | 2   | 1    |
| Whitehouse, H. B., and Sons      | New Priestfields    | 2         | 1   | 1    |
| Whitehouse, H. B., and Sons      | Priorfields         | 3         | 2   | 1    |
| Total                            | DUDLEY DISTRICT.    | 130       | 75  | 55   |

| Blackwell and Co.           | DUDLEY DISTRICT.  |    |    |    |
|-----------------------------|-------------------|----|----|----|
| Russell's Hall              | 5                 | 1  | 4  |    |
| Shut End                    | 4                 | 2  | 2  |    |
| Old Hill                    | 2                 | 0  | 2  |    |
| Woodside                    | 3                 | 2  | 1  |    |
| Dudley, Earl of             | Coneygre          | 3  | 2  | 1  |
| Dudley, Earl of             | Level             | 3  | 3  | 0  |
| Dawes, W. H.                | Withymoor         | 2  | 2  | 0  |
| Evens and Martin            | Park Head         | 2  | 1  | 1  |
| Firrstone, W. and G.        | Oak Farm          | 2  | 2  | 0  |
| Firrstone, W. and G.        | Laws              | 3  | 2  | 1  |
| Gibbons, B.                 | Old Windmill End  | 3  | 2  | 1  |
| Gibbons, B.                 | Netherton         | 2  | 1  | 1  |
| Gibbons, B.                 | Ketley            | 3  | 0  | 3  |
| Hall, Holcroft, and Pearson | Corby's Hall, New | 4  | 2  | 2  |
| Hall, Holcroft, and Pearson | Brettle Lane      | 2  | 2  | 0  |
| Haden, William              | Old Level         | 2  | 1  | 1  |
| Hingley, Noah, and Sons     | Dixon's Green     | 1  | 0  | 1  |
| Mathews, William            | Corby's Hall      | 4  | 2  | 2  |
| New British Iron Company    | Ley Wood          | 6  | 3  | 3  |
| Total                       | SHROPSHIRE.       | 62 | 33 | 29 |

| Foster, W. O., Esq., M.P.   | FOREST OF DEAN. |   |   |   |
|-----------------------------|-----------------|---|---|---|
| Cinderford Iron Company     | Newham          | 4 | 2 | 2 |
| Forest of Dean Iron Company | Park End        | 2 | 0 | 2 |
| Gibbons, Benjamin           | Soudley         | 2 | 0 | 2 |
| Ebbw Vale Company           | Oakwood         | 1 | 0 | 1 |
| Total                       | 9               | 3 | 6 |   |

| Fenton Park Iron Company                            | NORTH STAFFORDSHIRE DISTRICT. |   |   |   |
|---|-------------------------------|---|---|---|
| Granville, Earl of                                  | Fenton Park                   | 2 | 2 | 0 |
| Heathcote, J. Edensor                               | Shelton                       | 8 | 7 | 1 |
| Heath, Robert, Esq.                                 | Apedale                       | 4 | 3 | 1 |
| Klinnersley, T., Esq., Trustee of late              | Biddulph Valley               | 3 | 3 | 1 |
| North Staffordshire Coal and Iron Company (Limited) | Clough                        |   |   |   |

posed to the high temperature of tropical climates. It emits less smoke, and produces a greater heat than ordinary steam coal. As a guarantee of the value of the patent the promoters, as also the patentee, have agreed to accept paid-up shares for the transfer of the patent and the lease of the premises, which latter are situated on an eligible site on the banks of the Thames. By this arrangement all the cash capital obtained from the public will be employed for the development of the undertaking. It will be known as the General Steam Fuel Company, and incorporated under the Limited Liability Act, with a capital of 30,000*l.*, in shares of 1*l.* each.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 8.—The Iron and Coal Trades have not as yet undergone any particular change; but as the spring advances, however, they are both fully expected to improve.

The safety-lamp invented by Mr. T. Y. Hall, described in the *Mining Journal* of Dec. 28, is certainly a most ingenious invention. First, it is calculated to burn paraffine and other oils, and to give a much greater light than other lamps, thus enabling a much finer gauze, or, if necessary, several gauges to be used, one within the other. This is a most important consideration, the present obscured light tempting the coal hewer to suspend his lamp within dangerous limits to the swing of his pick. Again, it is so adapted as to be capable of consuming gas instead of oil, the gas being supplied by receivers, or otherwise. It is also capable of being adapted for the penetration of dangerous gases where there is little or no air, the lamp being enclosed in a case partly of glass to admit light, the whole lamp, or only the glass portion, surrounded if necessary with gauze, the fresh air being admitted by suitable pipes connected with a receiver circulating freely in and out of the lamp, and into the air-tight casing surrounding the miner, enabling him to penetrate dangerous gases for short or long distances, when such is needed in dangerous mines. This might in some cases be of the utmost importance, as it might be the means of saving many lives. The lamp, indeed, has so many contrivances and adaptations as to make it difficult to say which is the most ingenious. But the fact of its giving a greater amount of light is, perhaps, the most important. But the merits of it will be best shown and appreciated by actual experience, and we have not had an opportunity as yet of observing it in this way. At the same time it must be admitted that most practical men prefer a lamp of simple construction, and some objections may be taken to it on this score.

The execution of the memorial to George Stephenson, to be erected in Newcastle-upon-Tyne, was about six months ago entrusted to Mr. Lough, the sculptor, and will be in the very highest style of art, worthy of the artist's fame, the eminent man whom it is designed to honour, and of the town which boasts so many specimens of George Stephenson's achievements. Four of the statues are now cast in bronze, and in the hands of the chaser, the fifth is nearly ready to leave the mould, and has, perhaps, already done so. Arrangements have been completed for the erection of the pedestal on which the five colossal bronze statues are to be placed, and the stones for that purpose have been for some time in course of gradual selection from the quarry chosen by the local committee. The monument is to be placed on a triangular piece of ground near the north-east angle of the Central Railway Station, and facing St. John's Churchyard.

There was a fatal boiler explosion at the Byers' Moor Colliery, Crookgate, on Tuesday. The colliery is the property of Messrs. Bowes, and has only been working a few months. The boiler was one of two that were erected on a bed of stone and brick, to the north of the engine-house and pit. The second boiler was undergoing repair, and the boiler-smiths were at work upon it when the other exploded, and was shattered into four pieces, the sides being flattened with the force of the concussion, three of which were propelled to distances varying from 60 to 100 yards from their original position; and the fourth piece, the "egg-end," was carried in an opposite direction, alighting in a ploughed field. A huge solid iron ball, called a "damper," was thrown into the air, and in its fall embedded itself in the ground. The boilers were 46 ft. long by 5 ft. 3 in. diameter, were built by the well-known firm, Messrs. Palmer, of Jarrow, and were of the ordinary thickness,  $\frac{1}{2}$  inch. They were only brought into use on Oct. 17. The cause of the accident is quite a mystery at present. The boiler was all right to appearance only a few minutes before the explosion, and for that reason the officials are unable to assign any cause for the occurrence.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 9.—The quarterly meetings of the Iron Trade have been held—yesterday at Wolverhampton, and to-day at Birmingham. The former meeting was as flat as can well be conceived. The attendance was small, and it was divided into several detachments. A portion were in a dining room at the Swan Hotel, to which access is gained by an awkward staircase. Others were in different rooms of the hotel, but the greater part occupied a long narrow gateway which leads to the stable-yard; and from time to time, as vehicles passed through the space, gentlemen present managed to squeeze themselves against the wall, and just save their toes from being crushed by the passing wheels; but those of stouter build had to bolt out into the street. It was a raw, gusty day, admirably adapted for the promotion of influenza, toothache, or rheumatism, and no few cases of illness have their source in these meetings which are held as described. Threats have been used of prosecutions for obstructing the street, and it is now really time that the sanitary inspector should interfere, and prevent the ironmasters from risking their health by such exposure, even as people are forcibly moved from a house dangerous to health. Very little, if any, business was done at the Wednesday's meeting. The uncertainty as to the issue of the *Trent* affair, and the expectation that a few hours might bring definite information, indisposed everyone to operate. The makers of hematite pigs have been asking an advance of 2*s.* 6*d.* per ton on last quarter's prices, but there was not the slightest disposition to accede to it on Wednesday, and had any sales been pressed they must have been at rates fully as low as were given three months since. After the meeting had dispersed the news came that Messrs. Slidell and Mason were on their way to this country, but too late to affect the market. The meeting at Birmingham, to-day, has been much more spirited. It was not a busy quarter-day, but there was a decided improvement in the tone of both buyers and sellers. The orders given out for Finished Iron were not large, but there was a general conviction that the suspense which has been dissipated by peaceful news has kept orders back, which must now be given out. There are more American orders, the execution of which was dependent on whether peace or war would be the result of the demand presented by Lord Lyons. If the houses here were disposed to give the usual terms of credit a considerable trade could at once be done with the Federal States; but there is little disposition to give credit under the circumstances, which make it from week to week uncertain whether a suspension of specific payments may not be resorted to.

Pig Iron was in decidedly better demand. Best qualities of hematite pigs were sold at 3*s.* 5*m.*, an advance of 2*s.* 6*d.* per ton on the prices of last quarter-day, and in all cases these pigs fetched more money. The attempt to send up North Staffordshire pigs 2*s.* 6*d.* per ton has failed, and 2*s.* 1*m.* must be quoted as the selling price. Other sorts sold generally at last quarter's prices, but the market was certainly firmer. Tin-Plates were 1*s.* per box more, but buyers did not appear disposed to operate as yet. The telegram announcing a reduction of  $\frac{1}{2}$  per cent. in the rate of discount at the Bank of England helped to give confidence. On the whole, this quarter begins more hopefully. More American orders, both for iron and hardware, have been given out during the last week for that market than for some time; and it seems probable that prices are rising to such a point that English goods may pay the Morrill Tariff rates. There is good ground for anticipating that the war will not last very long, as the resources of the Federal money market appear to be drying up rapidly, and borrowing in Europe is out of the question. When the burden of taxation, increased by high prices and depressed trade, begins to be felt, it is by no means improbable that popular feeling may take a new direction; nay, that the army on the Potomac may be needed to defend the Government from its own subjects. The war threatens to become so increasingly vindictive that the European Powers will at length, probably, unite to terminate a contest which shows no sign of producing any tangible result, which is inflicting great evil on the world in general, and which, as in the case of permanently stopping the Southern harbours, is being carried on in a manner which calls for the protests of every civilised people.

The East Indian trade is likely to be large this year, whilst the development of the French Treaty promises to be no unimportant assistance in the restoration of the iron and hardware trades to activity.

At the North Staffordshire Coal and Ironmasters' Association quarterly meeting, held at Stoke-on-Trent, Mr. Wragge was appointed Chairman for the ensuing year. Mr. Heathcote (of Apedale) and Mr. Wragge were appointed to represent the association at the Mining Association of Great

Britain. Several firms in the district were admitted members of the association. The state of the iron trade was reported to be in much the same condition as for some months past. It was stated that several rather considerable orders for finished iron had come into the district lately. Pigs maintain recent prices, sellers asking an advance of 2*s.* 6*d.* per ton; but buyers holding off engagements of any magnitude at present, except at former prices. The coal trade is in a moderately good condition.

#### REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

JAN. 9.—The intelligence of the pacific settlement of the *Trent* outrage has been received with satisfaction, and in commercial circles a general belief is expressed that the trade of the country will improve now that the doubt and uncertainty which existed as to a rupture with America is removed. The demand for plates for shipbuilding is improving, and there is an additional enquiry for railway iron work. We regret that a dispute has arisen amongst the railway spring makers employed by Messrs. T. Turton and Sons, Sheaf Works, Sheffield, and Messrs. Canimelli and Co., of the Cyclops Works, in the same town, on account of wages. The men require an advance of 6*d.* per cwt., which the above firms consider they are not justified in doing. The continental trade is improving, and orders from Germany and Canada are on the increase. Some demands for iron have been received from America, but manufacturers refuse to execute them unless they are accompanied with cash. The Sheffield Steel and Cutlery Trades are dull, and a large amount of distress prevails amongst the working classes. In Lancashire the state of employment is worse than heretofore, and nearly the whole of the working classes in the cotton and woolen trades are only making half time; the machinists, too, are only partially employed. In Yorkshire the coal masters are universally lamenting the depression which exists in the coal trade, without being able to suggest a remedy for the improvement of it. At the meeting of the Yorkshire Coalmasters' Association at Barnsley, last week, the question of prices was discussed, and it was generally admitted that the present rates of coal could not be reduced unless the wages of the colliers were lessened. It was not deemed prudent to disturb the relationship existing between the operative miner and the coalmaster.

In the case of Bedfor, Bury, and Co., of the Regent Ironworks, Sheffield, an arrangement has been made with the creditors to guarantee 12*s.* in the pound, by instalments—namely, 5*s.* on the 1st of Oct., 1862; 3*s.* on the 1st of April, 1863; and 4*s.* on the 1st of July, 1863. The notice of the assignment by the Midland Iron Company to the creditors appointed at the late meeting has just been published.

The foundation stone of a new church at Whittington, Derbyshire, was laid on Wednesday. In a few years the population has increased from 370 to 3000, by the development of the coal and iron trades at that place. The editor is to cost 23*s.* 0*m.*, and a part of the capital has been subscribed by the coalmasters of the locality.

There is nothing new to notice this week in the lead mining interest of Derbyshire, except that great anxiety is manifested to have the new gold-crushing machine at work at the Prince of Wales Mine, in the Peak.

The new year bids fair to be a very remarkable one in the mineral history of Derbyshire. The extent and value of the county as the seat of profitable speculation is only just becoming known. The following account will show its importance:—"For the production of coal in the county of Derby there are 153 collieries, with steam power equal at least to 49,000 horses, for raising coal from an aggregate depth of shafts of about 30,000 yards. More than 1200 horses and ponies are employed in the transit of coal in the mines underground, and about 17,000 men and boys. In the ironstone mines there are employed underground about 2100 men and boys, producing upwards of 400,000 tons of ironstone annually. The largest collieries are those belonging to Mr. Richard Barrow, of Staveley, which are capable of raising 800,000 tons of coal annually from five shafts. The last new shaft can raise 1600 tons daily. More than 1100 tons have been raised in one day of twelve hours. The Butterley Company have power of production equal to 700,000 or 800,000 tons annually, from fourteen shafts. The Clay Cross Company (Mr. W. Jackson and partners) have a power of production equal to 500,000 tons annually, from three shafts. Barber, Walker, and Co. of upwards of 400,000 tons, from six shafts. These are the largest producers, and these, it is mentioned, are what the respective collieries can raise if the demand requires it. There are other large collieries, as the Shipley, A. M. Mundy, owner; Swannick A. P. Morris, owner; the Riddings, James Oakes and Co., owners; Cinder Hill and Huddington, Thomas North, owner; Wingerworth and Grassmoor collieries, all of which raise large quantities. The seams worked extensively in Derbyshire for sale are the Top Hard, No. 2 in section; Dunstan Seam, No. 3; Main soft, No. 7; Deep Hard, No. 8; Black Shale or Silksome, No. 12; and Kilburn, No. 14. It may be remarked that at one of Messrs. Oakley's collieries, near Alfreton, petroleum or mineral oil has been exuding from a rock above the seam, No. 14, in a section or section. As much as 100 gallons weekly was at one time yielded, but now it is nearly exhausted. Messrs. Young and Company were the first to refine this for oiling delicate machinery, such as watches, &c. The American mineral oil is similar to this. The production of coal in Derbyshire is distributed over a great extent of country. On the south-west side, to Bristol, largely to the eastern counties, to London, and the south coast, for household consumption. The Clay Cross Company alone sends upwards of 300,000 tons annually to London, to the south of London, and the eastern counties. This supply is chiefly the Silksome coal (seam No. 12 on section), which now ranks high for household purposes. This coal successfully competes with the Northumberland and Durham coal in the London and other southern markets, to which Mr. Barrow, the Butterley Company, Barber, Walker, and Co., and other owners, also supply large quantities. The hard coals of Derbyshire are extensively used for locomotive purposes in the midland counties and South of England; besides large exports to France, Russia, and other parts of the Continent for locomotive use. Mr. Barrow, and the Butterley Company, Messrs. Barber, Walker, and Co., are the largest raisers of hard coal. The consumption of coal at the iron works in the county is about 1,000,000 tons."

IRON MANUFACTORIES.—There are fifteen manufactories of pig-iron in the county, with 23 furnaces in blast, producing about 126,000 tons of pig-iron annually:—

|  | List of Furnaces in Derbyshire. | In Blast. | Built. |
|--|---------------------------------|-----------|--------|
| 1. Alfreton, J. Oaks and Co.               | 2                               | 3         |        |
| 2. Brimington, J. Knowles.                 | 0                               | 1         |        |
| 3. Butterley, Butterley Co.                | 2                               | 3         |        |
| 4. Codnor Park, Butterley Co.              | 3                               | 4         |        |
| 5. Clay Cross, Clay Cross Co.              | 1                               | 3         |        |
| 6. Morley Park, a Company                  | 1                               | 2         |        |
| 7. Newbold, S. Beale and Co.               | 1                               | 1         |        |
| 8. Oakthorpe, a Company                    | 1                               | 2         |        |
| 9. Renishaw, Appleby, and Co.              | 1                               | 2         |        |
| 10. Stanton, Crompton, and Co.             | 2                               | 3         |        |
| 11. Staveley, R. Barrow                    | 2                               | 2         |        |
| 12. Sheepbridge, W. Fowler and Co.         | 2                               | 3         |        |
| 13. Unstone, H. Rangeley                   | 1                               | 1         |        |
| 14. West Hallam, H. B. Whitehouse and Sons | 3                               | 3         |        |
| 15. Wingerworth, J. Carrington and Co.     | 2                               | 3         |        |
|  | 23                              | 36        |        |

The produce of twelve furnaces is sold out of the county, to be manufactured into bars, armour-plates, boiler-plates, sheets, and for railway purposes. The Butterley Company manufactures the produce of five furnaces into superior bar iron, boiler-plates, sheets, and large girders for armour-plated vessels, and other purposes. At the present time this company are rolling the largest and heaviest girders which have yet been produced, thus keeping pace with the times which require such heavy masses of manufactured material. The iron manufactured by this eminent and spirited company will stand the test with the best brands of the country. Mr. Richard Barrow, of Staveley, uses the iron made by himself, as well as from two other furnaces for castings of every description. So extensive and complete are these works, that upwards of 4000 tons of girders, columns, &c., for the Exhibition building of 1862, were turned out of them in three months, besides making all the patterns, and without interfering with the ordinary work of the foundries. Mr. Barrow has now an order for two miles of railing for the galleries of the Exhibition building, which will be completed in a month. James Oakes and Co. have long been celebrated for the excellency of their castings in gas and water pipes, as well as every other description. The firm has for many years enjoyed a high reputation for the good quality of workmanship and material. Iron made from the materials of Derbyshire will bear comparison with the iron from any part of the country. The pig iron from West Hallam Works, H. B. Whitehouse and Sons, stood the greatest test at Woolwich some time ago of any iron selected from the bulk. The test of armour-plate at Portsmouth, Nov. 22, 1861, made by John Brown and Co., of Sheffield, of cold and hot blast iron, from the Sheepbridge Ironworks, Chesterfield, Messrs. W. Fowler and Co., proprietors, exceeds every test hitherto made. For the manufacture of bar-iron, boiler-plates, rail-way material, and steel, the following works are established:—Butterley Company, Alfreton, manufacturers of bar-iron, boiler-plates, sheets, and heavy girders. Frith and Sons, Whittington, Chesterfield, large manufacturers of steel. Webster and Co., Killamarsh, near Chesterfield, manufacturers of steel and wire. James Eastwood and Sons, Derby, manufacturers of bar-iron, steel, iron, forgings and vices of all descriptions, railway wrought-iron, wheels, tyres, and axles. Castings of all descriptions are largely made by Richard Barrow, Staveley; by James Oakes and Co., Riddings, Alfreton; and by Messrs. Appleby and Co., Renishaw Works, near Chesterfield, &c. The Clay Cross and the Sheepbridge Companies make heavy castings. As the material of South Staffordshire (which has so long been celebrated for its superior make of iron) is being rapidly exhausted, and cannot supply all the existing works, no doubt the manufacture of malleable iron will be extensively developed in Derbyshire. There are in the county many eligible sites for the erection of rolling-mills, with ample supplies of good water, adjoining collieries producing coal suitable for iron manufacture, and small coals for engine purposes. So extensive and profitable a field for labour and capital, it is to be hoped, will not be suffered to be much longer unoccupied.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 9.—The shipping trade gives indications of increased activity, and the late change in the wind has had a very favourable effect on the number of ships in the different ports. During Saturday and Sunday hundreds of vessels arrived at Penarth Roads, and both the Cardiff and Newport Docks have since had a large accession of ships. Freights continue at firm rates, except in some instances where American vessels are employed. The local shipowners complain bitterly of this interference with their trade, and they hold that our free trade law gives undue advantages to the foreigner. Llanelli is fast becoming one of the most important points of the Channel. Since the change of wind upwards of 50 vessels have arrived in the harbour, eight being loaded with copper and lead for the works. Increased activity prevails along the docks. At the usual monthly meeting of the Llanelli Harbour Trust, on Friday, Captain Ross, the Harbour Master, amongst other matters, reported that a very considerable and dangerous sand bank had accumulated before the entrance of the Copper Works Dock. Mr. Nevill, one of the copper-works proprietors, consented to contribute one-third of the expense of removing it, and a number of labourers had been immediately set to work. Several members remarked that this might become a dangerous obstruction to the navigation of the port, and the steps taken by the Harbour Master were entirely approved.

At the Newport Divisional Petty Sessions, on Saturday, Thos. Hayman was charged with infringing the rules of the Risca Colliery, by smoking in the Black Vein Pit. Mr. A. S. Palmer, the manager of the colliery, sent for a remand, as it was necessary to have the rules certified by the Government Inspector. Three or four others had been caught smoking, and he would bring them all before the magistrates next Saturday. It appears that Hayman was in the Cymmer Pit when the fearful explosion took place there some years since. Sarah Thomas was charged at the same time with stealing coal, the property of the Risca Company. She was cautioned and discharged.

Several fatal colliery and mine accidents have occurred during the week. On Wednesday last a young man, named Daniel Davies, was engaged at his usual avocation of

underground haulier at the Pencoed Colliery, when a portion of the roof gave way and fell upon him. He was buried in the debris, and it was with great difficulty he was extricated. The injuries he had received were so severe that he only survived one hour. On Tuesday an inquest was held on the body at the St. David's Head, Bryn, before Mr. Bonville. When the above facts were proved, and it was shown that every precaution was adopted by the colliers in securing the roof with efficient props. The jury returned a verdict of "Accidental Death." On Monday an inquest was held at the White Hart, Abercarnard, before Mr. Overton, coroner, on the body of John Jenkins, collier, aged 40 years. On Saturday the deceased was at work in a stall at the Grag Colliery, when a fall came down, and he was killed on the spot. It was stated that the deceased had left a wife and seven children. The jury returned a verdict of "Accidental Death." On the same day an inquest was held at the Patriot Inn, Dowllas, on the body of Ross Baynes, aged 16 years. Deceased was in the employ of the Dowllas Company as stoker. On Saturday he was engaged in disconnecting one of the wagons, when he fell down, and the wheels of the engine passed over him. He died on Sunday from the effects of the injuries received. The jury returned a verdict of "Accidental Death."

**THE COAL TRADE AT BRISTOL.**—The export coal trade at Bristol, considering the general depression which now prevails in commercial circles, may be stated to be in a healthy condition. During the month of December the over-sea exports reached 1067 tons—to Trinidad, 208 tons; Valencia, 111 tons; St. John's (Newfoundland), 268 tons; Havannah, 450 tons; Jamaica, 5 tons; and St. Michael's, 25 tons. We may add that during the year 1861 the exports of coal from Bristol amounted to 17,247 tons, or an average of 1437 tons per month, the following being the places to which the largest shipments have been made:—Tobago, 558 tons; St. John's, 687 tons; Malta and Constantinople, 490 tons; Rangoon, 2917 tons; Havannah, 450 tons; Valencia, 439 tons; Barbados, 2558 tons; New York, 600 tons; Fayal, 449 tons; Mauritius, 509 tons; Demerara, 1762 tons; Barcelona, 415 tons; Montreal, 465 tons; Melbourne, 320 tons.

**THE NEATH SHIPPING TRADE** for the month of December, 1861, was as follows:—Number of vessels, 94, of 7010 tons register.—Imports: 836 tons of iron ore, 2625 tons of copper ore, 210 tons of pig-iron, 109 tons of pit and chemical wood, 12,000 bricks, 165 tons of slate, 360 tons of flour, 2440 quarters of barley, 637 quarters of oats, 50 quarters of malt, 14 tons of barley-meal, 66 tons of potatoes, and sundry goods.—Exports: 9115 tons of

## THE MINING JOURNAL.

Darwent Lead Mining Company, and the other portion at the joint expense of Lord Crewe's trustees and the Rev. D. Capper. Surveys have also been made for a new road from Blanchland to Acton Mill, on the way to Hexham.

## NATIONAL ASSOCIATION FOR THE RELIEF OF BRITISH MINERS.

Last evening a public meeting was held at the Westbourne Hall, Westbourne Grove, Bayswater, for the purpose of explaining the object of this Association, and soliciting the public patronage and co-operation in its behalf.

Mr. HARVEY LEWIS, M.P. for Marylebone, being called to the chair,

said he had no doubt when the objects of the association were more thoroughly known they would excite greater interest in the public mind than had been the case up to the present moment. The object of the association was to endeavour by public meetings in different parts of the metropolis to bring before the public the great claims that the British miner had upon their support and sympathy. They all knew how, by the untiring zeal of the too often dangerous pursuits of the British miner, that the wealth of England was progressed and maintained; and it was, therefore, with the view of relieving as much as possible the direful consequences resulting from the avocation of the miner, that the National Association for the Relief of British Miners had been established. The well-known names of those who had become connected with the association were a satisfactory guarantee for the fidelity with which the objects of the association would be pursued, as those parties held themselves responsible to the public for the proper conduct of its affairs, and for the proper disposition of what might be entrusted to their care.

Mr. G. A. TOWNSEND (the general manager) explained at some length the objects of the association, and applied to the British public to come forward and assist in ameliorating the neglected condition of the British miner, whose avocation so materially contributed to the enviable position which this country occupied among the nations of the earth. It was not, perhaps, generally known that there were 300,000 persons who constantly depended for their daily bread by toiling beneath the surface of the earth in the production of those commodities which had made and still maintained our commercial prosperity. In coal mines alone, 1,000 colliers were annually killed, and 10,000 permanently injured; and, he was sorry to add, that during the year 1860 the number of those killed had been increased by 20 per cent. The average age attained by the miner was compared with 45, the average age attained by the agricultural labourer. It seemed inexplicable, indeed, it seemed "passing strange," that no step had been taken to ameliorate the position of the British miner. They had hospitals founded for the sick and wounded, almshouses for the aged and decayed, asylums for the dumb and blind, dormitories for young thieves, and model prisons for old thieves, yet nothing had been done to assist the British miner, upon whom, perhaps, more than upon any other class, the nation depended for its commercial importance. In the year 1855 a select committee of the House of Commons was appointed "to inquire into the nature, causes, and extent of those lamentable catastrophes which have occurred in the mines of Great Britain." The said committee, in their report, stated that they could but feel apprehension that they had, in a great measure, failed in devising adequate remedies for the painful calamities they had to investigate. They entertained, notwithstanding, sanguine expectations that the attention of the public would be availed of to this interesting subject. The present association, therefore, was established in accordance with that minute, and it was proposed by its promoters that operations should be divided into three sections—science, education, and relief. Education, as a means to the same end, by awakening a proper sense of the responsibility which attached to persons holding positions of trust, who had many lives dependent on their care, and by making the great mass of our mining population aware of the dangers to which they are exposed, to render it impossible for incompetent persons to hold the position of overlookers in mines, whilst greater attention and less foolishness would be secured in the men. And, lastly, relief, by the collection of voluntary contributions adequate to the instant relief of the families of those killed, to secure for the infirm and disabled from a separate fund, to which the miners themselves would be encouraged to contribute their numerous mites, and to relieve them usually in affliction by the distribution of funds for the purposes indicated, in accordance with principles and regulations to be agreed by the association.

Letters were then read from Mr. Hedley, the Government Inspector of Coal Mines, during his hearty co-operation on behalf of the association, and suggesting the advisability of establishing a permanent fund; from Mr. Baker and Mr. Lionel Brough, Directors of Coal Mines, offering every assistance in their power to place the association in that position which it so eminently deserved.

Mr. TOWNSEND said that Sir Fitzroy Kelly had become the President of the association, and the Right Hon. Lord Carew and Mr. Frank Crossley, the vice-presidents. They also ad the heavy co-operation of the Earl of Shaftesbury.

A resolution was then moved by Mr. J. HENRY WOOD, F.R.S., late M.P. for South Lancashire, seconded by the Rev. H. BOURNE (a colliery missionary), and carried unanimously, that the effect that in the opinion of the meeting, it was highly desirable and necessary that steps should be taken to prevent, as far as human agencies could, accidents in mines, and that when they did occur prompt and effectual aid should be rendered to the miners; and to provide for the education of the mining operatives generally, especially of the rising generation.

The next resolution was moved by the Rev. W. ARTHUR, M.A., and seconded by Mr. CARVELL. It was to the effect—that the association proposed to accomplish the objects in the foregoing resolution, and is, therefore, entitled to public support ; and this was carried unanimously, that a local committee should be appointed to aid in carrying out the objects of the Association.

A vote of thanks having been passed to the Chairman, and the compliment duly acknowledged, the proceedings terminated.

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**THE GREAT DAREN SILVER-LEAD MINING COMPANY (LIMITED).**  
Incorporated by virtue of the 19th and 20th Vic., c. 47, and 20th and 21st Vic., c. 14.  
Capital £36,000, in 12,000 shares of £3 each.  
£1 to be paid at the time of subscribing, and the balance, if required, by instalments of £s. each.

DIRECTORS.—  
CHARLES PRESTON, Esq., Water-lane, Tower-street; and Hull.  
JAMES FAIRBAIRN, Esq., Twickenham.  
JOSEPH COTTERELL, Esq., London and South-Western Railway.  
ALBERT MILSTEAD, Esq., Ship-chambers, Tower-street.  
E. C. COCKCRAFT, Esq., Admiralty, Somerset House.  
JOSHUA NUNN, Esq., 67, Gracechurch-street.  
JOHN HADKINS, Esq., 43, Mark-lane.  
BANKERS—Bank of London, Threadneedle-street.  
SOLICITORS—Messrs. Preston, Turner, and Garrett, Water-lane, Tower-street.  
AUDITOR—John Dunbar, Esq., 63, Moorgate-street.  
LOCAL PURSER—C. M. THOMSON, Esq., Banker, Aberystwith.  
CONSULTING ENGINEER—Capt. M. Francis.  
SECRETARY—Mr. Thomas Sparge.

REGISTERED OFFICES,—224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

This company is formed for the purpose of acquiring and developing certain rich mineral properties situate in the county of Cardigan, and known as Daren, Daren East, and Cwm Daren Mines, about six miles from the port of Aberystwith, in the centre of the richest silver mines in that country.

The Old Daren is one of those ancient mines formerly worked by Sir Hugh Myddleton, from which he derived immense profits, with the inefficient and rude machinery then employed to carry on the works. The ore raised from the lode in this sett is extremely rich, producing upwards of 40 ozs. of pure silver to the ton, and about 75 per cent. of lead, thus taking the first place amongst the argenticiferous lead ores of Cardiganshire.

The geological position of the property is Cambrian clay-slate of moderate compactness, requiring little or no timber to keep open the ground, and there is abundance of water-power for all purposes, thus avoiding the necessity of expensive machinery.

This property is considered by mining agents, and those competent to judge of its value, to be one of the richest in the county, and it is fairly assumed, by statistical calculation, that as soon as the old mines are drained, the various levels laid open, and the Cwmymlog lode fairly explored, a clear profit of £300 per month will be returned to the company; in fact, the refuse thrown away by the old workers is being worked over at the present time at a clear profit of 10s. in £1.

The mine is held under a lease for 21 years from the present time, at 1-14th dues, ample machinery is already erected to bring it to a successful issue. The operations will be prosecuted with the least possible delay, under the able superintendence of Capt. Matthew Francis, and there is every certainty of its being a rich and lasting mine.

The first issue of shares will be limited to 6000, that being considered sufficient to carry out the necessary works, and bring the mine into a dividend state.

Further particulars will be found in the reports attached; and every information respecting the property will be furnished on application to the secretary, at the office of the company.

#### REPORTS.

These mines are situated at about six miles to the eastward of the town of Aberystwith, in the parish of Llanbadarn, and County of Cardigan, Wales. The Old Daren is one of the mines worked by Sir Hugh Myddleton, from which, and others near, he realised such immense wealth. The stratum of rock of this district is the Cambrian clay-slate, of moderate compactness, requiring no timber supports for the levels, and not expensive to work. In the immediate vicinity, to the southward, on parallel veins, are the East Daren, Cwm Sebon, Cwm Erfin, and the Bwlch Mines, all of which are now yielding large and regular returns, and most of them great profits. In the Darenas the main lode has a direction about N.E. and S.W., varying a little more east in Cwm Daren, with an underlie of about 2 ft. in a fathom's north; its general size is from 12 to 15 in. wide, and in places it opens out into branches to many feet, where it is more productive. There are also diagonal veins intersecting it, from which quantities of ore have been gotten. The ore generally is rich for silver, having about 42 oz. to a ton, as well as yielding 75 per cent. of lead; altogether worth 217 per ton. The sett is very extensive, and the open cuttings at surface, as well as the large heaps of lode stuff and refuse ore lying about, show that the workings, both shallow and deep, ancient and more modern, were both extensive and productive (as shown in the section I herewith send), and from which the returns must have been great, as even now the refuse heaps are being reworked for possibly the third or fourth time at a profit. Of these workings, owing to the water being up to the adit in the old mine, and the stulls, &c., above being broken as well as in the Cwm Daren, I could only inspect the Great Daren, where I went through the different levels and inspected the lode and workings therein. In the copper level, home to and for a considerable distance beyond the air shaft, the backs have nearly been worked away. In the level Coed the workings for ore are marked, the principal of which are near the air shaft, extending down to Francis's level, where it is shorter than above. In Oliver's level, which is the deep adit of the mine, are two shoots of ore worked away; the ore alluded to has been partly copper and lead. The engine-shaft is sunk to a 10 ft. level, below which there are runs of orey ground again, longer than in driving on Francis's level, where it produced ore, and the lode bears a good appearance for some way, and westward is the most kindly, where in a stop it appears to be enlarging, having the side branches taking off south, and which, in my opinion, will lead to a deposit either in that direction or in depth—possibly in both. I should, therefore, advise that both these branches be worked upon, and the level extended west to take a run of ore gone down under Oliver's level, near the winze, from Francis's level, which I think well worth doing; as also to sink the engine-shaft as quickly as possible to a level (say) 20 or 22 fathoms. Of the old mine I can only speak from the evidence of what I saw on the surface, the section, and information I gathered from, I believe, reliable sources, all of which induce me to believe that large quantities of ore have been raised down to the 40 ft. level, but that the deeper or deepest level was poor, and no ore raised therefrom, which I think is very strange, and I am disposed to believe the supposition of some that this level was not on the main lode, but a poor branch thereof; or, what in my opinion is possible, there may have been some influencing cause intervening which, when got through, the lode will again become as productive as before. Be this as it may, no mine should be abandoned for one poor level, especially where the lode has been generally so productive above; and I know of instances in point where perseverance has succeeded in getting at greatly profitable results below, under similar circumstances. I would, therefore, advise this as a good speculation to resume workings here, by means of pumps, in Barr's or Teague's shaft, worked by flat-rods from the wheel, and as I learn that there is a diagonal lode taken off north-west, on which above the 20 ft. level a good deal of ore has recently been raised for the distance driven, but it has not been extended on here, nor at all explored below. Besides this, both the East Daren as well as the Cwm Sebon lodes pass through this part of the sett at within 22 fathoms of the main lode, and I feel convinced there are parties desirous to obtain these mines. Upon the whole review of what I actually saw and learnt of the state of the mines, and taking into consideration the ample and constant surface water-power they possess, having part of the Bwlch, the whole of the Cwm Erfin and Cwm Sebon watercourses, as well as the water drawn out of all these mines, with which large wheels, both for pumping as well as crushing, and other dressing machinery of ample power, could be worked effectually, I have no hesitation in recommending them as a good adventure, properly and regularly carried out, as follows:—To sink, as before recommended, at Daren East, and instead of waiting the time, and incurring the expense of drawing Oliver's adit, Francis's level being driven so as to take off the water to that depth, I should recommend a large powerful wheel to be erected to pump the water from the old mine, and to work it independently below that level by means of horizontal rods, and by continuing to sink the shaft, and drive levels both on their veins and as cross-cut, in a proper manner, and as circumstances may dictate, and I have scarcely any doubt of success.

JESU HITCHINS.

*London, Nov. 5, 1861.—The Daren Mine is one of the oldest silver-lead mines in the county of Cardiganshire. The produce of this mine is an ore rich in silver, and the yield is very abundant; the earliest accounts speak of this as one of the most extraordinary mines in the district. One hundred years ago it was working under a Flintshire company, and making from £7000 to £8000 per annum profit. The lode or vein is excavated downwards from the surface for upwards of half a mile in length; much of the oldest of the workings are under water, and will have to be drained in order to restore them to their ancient rate of produce. Twenty years ago I unwatered these old excavations, and we immediately began to receive £1500 a year profit from them; but, on my taking the management of other mines, the water was again allowed to flow in and cover the ore ground, but it is not a difficult piece of engineering to again bring them into great profit. On my leaving the management the company directed their attention to the eastern parts of the mine, which were capable of being drained by tunnels or adits; a great deal of this work has been accomplished, and great quantities of rich ore sold from these works, yet the system has not been completed to the old mines, but there is not much to do with reference either to work or to outlay to realise and make very profitable many thousands of pounds that have been laid out in his work. After this is done, which will not cost more than three months to do, a section of the ground, on an average 70 yards high, and upwards of half a mile long, will be made available for tribute working on the Daren lode and branches which will yield a profit of £100 per month at once. I consider, however, this to be only a preparatory step, and a comparatively trivial result in demonstration of the great riches and value of the mine, for one reason—which is, that the Great Cwmymlog lode that gave £25,000 a year profit to Sir Hugh Myddleton, lies wholly intact, and in virgin ground, about 50 fms. to the south of the Daren lode at the western engine-shaft, and runs through one grant for upwards of half a mile in length. The adit cross-cut from Daren main lode may be taken into this lode at depths of from 50 to 60 fms.; and when this great lode—full of metal in every place it has been seen—yielding for every ton of lead 40 ozs. of silver, and making £600 to £700 a month profit; further eastward, at East Daren, where it is worked by steam-power principally, I say, when this great lode of silver ore is thrown open at the depths I have stated by means of adits, cutting off all the costs of drainage by machinery—although I will not attempt to estimate the profits—I will fearless state, as my opinion, that they will be greater than those of any mine now working, or than those of any mine that has ever been worked in Cardiganshire. All the machinery for the general business of the mine is erected on the ground, all the great outlay has been accomplished in this respect; and three months after starting there will be a parcel of ore ready for the market, which will be successively by other and larger parcels, until the projected plan of excavation is carried for exploring the Great Cwmymlog lode, and maturing the system of mining operations upon it. If I followed my own inclination, I should go into no calculation as to the quantity of ore that might be produced from such a lode periodically, but I feel that I should not be doing my duty without giving an analogical estimate of the yield of the Cwmymlog lode—for this purpose I shall take as an annual section of the vein to be worked away 400 fms. by 10 fms., or 4000 fms. worth, (say) £25 per fm., or the whole returns at £1000 per annum, and I consider it will be perfect management if the profits do not amount from one-third to one-fourth of the whole ore sales. I said previously that £25,000 per annum profits had been made from this lode in times when the mechanical appliances, generally, were not so well understood as they are now, I will further add that these profits were then made from a similar length of ground upon the same lode, and this, in some measure, will justify the views that I take of what may be expected from this great mine under the best and most modern system of silver-lead mining. I take it for granted that those who rely upon my judgment as to what can be done in a mine of such magnitude in modern times will not expect that these great results can be brought about by an inadequate capital as an example of what must be done in the richest mining lodes, and the most inexpensive mining of all hoped for to be realised, there would be, besides the cross-cuts, 400 fms. of longitudinal driving to be done with ventilating shafts in the line of ore ground, which I should not like to undertake for less than £4000. There is the drainage from the Old Daren Mine, from which I have estimated nothing in the shape of proceeds, (say) £3000; the completion of the adit system, (say) £2000; reserved fund to meet delays of ore in rail, £2000; and I have said nothing of the price of the mine, ore ground, and machinery. So that, although the sales are likely to be so large, and the profits commensurately extensive, they will have to be considered in connection with a considerable outlay, but I am sanguine enough to believe the income for all money invested will be cent. per cent. upon the outlay, and I am fortified in this reasoning by a knowledge that*

Goginan, a sister mine to Daren, that I also opened in the same locality, paid the shareholders annually £600 per cent. upon the subscribed capital.

MATTHEW FRANCIS.

*Jan. 2, 1862.—After carefully examining this extensive property, I beg to hand you the following report on its present state and future prospects:—In this grant there are three east and west lodes, and the former workings, which have been very extensive, being 50 fms. in the western and 40 fms. in the eastern part under the adit level for about 600 fathoms in length, were confined to the Great Daren lode alone, and from the nature and extent of the excavations the production of ore must have been of vast amount, and under these circumstances it seems very strange that no effort should have been made to prove the capabilities of the other lodes; there is, however, an adit that there is one for all times, but not for all men—a wise provision of Providence doubtless—and hence it may be that the riches of those virgin lodes are reserved for the present proprietors. The lode which seems next in importance to the Great Daren is the Great Cwmymlog lode, on the south of the former. This lode, from its position in this grant, and its great productiveness in other grants in the immediate neighbourhood, seems to invite a vigorous and spirited development, and looking at all the features of the case I entertain a very strong idea that its prosecution at certain points parallel to the productive portions of its sister lode (Great Daren) will be attended with equally large success. There are in the long line of workings on the Great Daren lode certain sections of unproductive ground, which doubtless lack some chemical property necessary to the formation of ore in the fissure or lode passing through it, and hence the poverty of the lode in these parts. I do not pretend to say what this property may be, but in the prosecution of the lode in question (the Cwmymlog) I would strongly advise that whatever shafts be sunk on the lode or cross-cuts driven they should be at points parallel to the productive portions of the Daren lode; and to this end, I recommend that as soon as the water is drained from the old mine by Francis's level, which will shortly be the case, a point be selected about the centre of the ore ground in the old mine, in the western part at Francis's level, a cross-cut be put out by a full force of men to see Cwmymlog lode at that point, and at the same time a shaft be sunk on the course of the lode at right angles with the proposed cross-cut, and as the ore made up to the surface on the Daren lode, I have a strong notion that a continuous production of ore will be found in the proposed shaft. At the western shaft, at the adit level, a cross-cut has been driven upwards of 30 fms., to cut the lode in question, and a small branch has been seen, which was supposed to be the lode by the former workers, but I am strongly opined that it is not so, and recommend a further extension of this cross-cut, to fully prove the point, as the finding the true position of the lode at this place would be of great assistance in the future operations. The Great Daren and Cwmymlog lodes are converging westwards, which is my reason for recommending operations here, to prove the latter lode from the levels on the former, as the cross-cuts would be much shorter than parallel to the eastern ore ground, and consequently less expensive. In reference to the old mine, I am not in a position to report its real state, as the levels have not yet been cleared, but from the operations going on there is every reason to hope that the whole may soon be seen; the engine has been set to work, and the water drained in the shaft 8 fathoms below Oliver's level, and it is expected that by Saturday the eastern part of the mine will be drained to the deepest point, and when this has been done I shall be able to give you full particulars of this important part of the mine. In level Coed (or Wood level) there are four tribute bargains working, at £10 10s. per ton for lead, and in the case of two of these a small tuft work payment is agreed on, to encourage them to explore some dead ground, to reach some known limbs of the lode, where success is hoped for. In two of the bargains good ore is being broken, and the men making fair wages, which is a guarantee of profit to the company, as the ore is worth £90 per ton, and the men have to render it clean at £10 10s. per ton. At Francis's level the men are engaged clearing through a break in the roof, and although the exact state of the level beyond is uncertain, it is confidently hoped that we may soon be able to begin taking up the slope in the bottom, and unwater the old mine westward, where there is every chance of letting many tribute bargains at remunerative points. I anxiously look forward to the draining of the deep level at the eastern part of the mine, and I trust in the course of a few days to be able to confirm that report. This has been an extraordinary property for productiveness, and seeing it has all come from one lode, while the others have been entirely unexplored, there seems strong presumption that future operations, if properly directed, must be crowned with great success.*

R. WILLIAMS.

*The mills might with a little alteration be adapted for rolling boiler plates and beams.*

*There is an unlimited supply of water-power, with several wheel races, one of which is occupied by a powerful water-wheel.*

*The works also contain a blast-furnace, with suitable blowing machinery and bellows, and a number of coke ovens and other requisites.*

*Adjoining the premises are a commodious family residence, with large garden, a nager's house, and twelve workmen's cottages.*

*Coal, iron ore, limestone, &c., are abundant in the neighbourhood, and the works are connected with the Cockermouth and Workington Railway by means of extensive sidings.*

*For further particulars, apply to Mr. HENRY FLETCHER, of the Lowca Ironworks, Whitehaven Castle; or to Mr. JAMES LUMB, Whitehaven.*

*Whitehaven Castle, December, 1861.*

**TO CAPITALISTS AND OTHERS.—TO BE SOLD, PRIVATE CONTRACT,** with immediate possession, the FENCE COLLIERY at the Woodhouse Mill Station, on the Midland Railway.

The shafts are sunk down to, and are working, the High Hazle seam of coal, and the colliery is at the present time capable of producing from 150 to 200 tons a day.

The colliery is very favourably situate, in close proximity to the Midland and Chester, Sheffield, and Lincolnshire Railways, and in the immediate neighbourhood of the manufacturing districts adjoining.

The celebrated thick, or Barnsley, seam of Yorkshire exists under this property.

A moderate depth, and a very favourable opportunity presents itself for the establishment of a colliery upon this seam at a comparatively small outlay.

The whole of the plant, machinery, cottages, &c., may be taken.

Further particulars may be obtained from, and offers will be received by, Messrs. RYLAND and MARTINEAU, solicitors, Birmingham; or Messrs. WOODHOUSE and JONES, civil and mining engineers, Derby.

**TO TIN-PLATE MANUFACTURERS, IRONMASTERS, &c.**

**TO BE LET,** for a term of years, as may be agreed on, with immediate possession, the EXTENSIVE TIN-PLATE and IRONWORKS, known as the DERWENT TIN-PLATE WORKS and SEATON IRONWORKS, situate near Workington, in county of Cumberland, and in the centre of the hematite iron district.

The works include the whole of the erections, furnaces, machinery, plant, &c., being driven by a 60 horse power steam-engine, and the whole being in the most complete and efficient working order, and capable of producing 800 boxes of tin-plate per week.

The mill might with a little alteration be adapted for rolling boiler plates and beams.

There is an unlimited supply of water-power, with several wheel races, one of which is occupied by a powerful water-wheel.

The works also contain a blast-furnace, with suitable blowing machinery and bellows, and a number of coke ovens and other requisites.

Adjoining the premises are a commodious family residence, with large garden, a nager's house, and twelve workmen's cottages.

Coal, iron ore, limestone, &c., are abundant in the neighbourhood, and the works are connected with the Cockermouth and Workington Railway by means of extensive sidings.

For further particulars, apply to Mr. HENRY FLETCHER, of the Lowca Ironworks, Whitehaven Castle; or to Mr. JAMES LUMB, Whitehaven.

Whitehaven Castle, December, 1861.

**TO COAL PROPRIETORS, MINING AGENTS, MANUFACTURING CHEMISTS, AND OTHERS.—TO BE SOLD,** a EXCELLENT PUMPING ENGINE, of 200 horse power, with BOILERS, fittings, connections complete. Also, FOUR EGG-ENDED BOILERS, 30 ft. by 4 ft. 9 in. domes. The whole of the above are quite equal to new, but to effect a clearance will be sold very low. Also, THREE HORIZONTAL ENGINES, with BOILERS, suitable for pumping and winding. Also, one LARGE CAST-IRON STILL, suitable for manufacturing chemist.—Apply to J. POLLACK FORSTER, 7, St. Peter's-square, Manchester.

**VALUABLE COAL FIELD TO LET,** in one of the situations in GLAMORGANSHIRE.—Apply to "A. B.", Post-office, Bridgend.

**BUTE DOCKS, CARDIFF—TO BRASS AND IRONFOUNDERS,** all that can be let.

**FOR SALE, BY PRIVATE CONTRACT,** all that can be let.

**BRASS AND IRON FOUNDRY,** called the BUTE DOCK FOUNDRY, immediately adjacent to the West Bute Docks, Cardiff, and having a branch of the Vale Railway running into it.

It comprises an extensive FOUNDRY, with 150 tons of boxes, three cupolas, and blacking mills, drying stoves, and dressing shop, capable of melting 40 tons per hour.

A SMITH'S SHOP, with 16 fires, olivers, cranes, and fan-blast.

A FITTING SHOP, with three lathes, a planing machine, three drilling machines, and three screwing machines.

TWO PATTERN SHOPS, and a 16 in. cylinder STEAM ENGINE, boiler and fittings complete. A boiler plate furnace, also a great variety of plant, &c., carrying on an extensive business, and an office and office requisites, stable and garden.



## THE MINING SHARE LIST.

## DIVIDEND MINES.

| Shares.   | Mines.        | Paid.        | Last Pr.      | Business.     | Dividends Per Share. | Last Paid.  |           |
|---|---------------|--------------|---------------|---------------|----------------------|-------------|-----------|
| 4000 Bedford United (copper), Tavistock..                               | 2 6 8..       | 54..         |               | 12 11 6..     | 0 3 0—               | Dec. 1861   |           |
| 240 Boscan (tin), St. Just..  | 20 10 0..     | 60..         |               | 35 10 0..     | 1 5 0—               | Dec. 1861   |           |
| 200 Botallack (tin, copper), St. Just..                                 | 91 5 0..      | 250..        |               | 445 5 0..     | 2 10 0—              | Feb. 1860   |           |
| 1000 Carn Bras (copper, tin), Illogan..                                 | 15 0 0..      | 80..         |               | 265 10 0..    | 2 0 0—               | Feb. 1861   |           |
| 200 Cern Cwm Brwyno (lead), Cardigan..                                  | 33 0 0..      | 33..         |               | 9 0 0..       | 4 0 0—               | April, 1861 |           |
| 5000 Connors (copper, sulphur) [L.]                                     | 1 0 0..       | 32s..        | 33s. 34s..    | 0 9 0..       | 0 9 0—               | July, 1860  |           |
| 2450 Cook's Kitchen (copper), Illogan..                                 | 17 0 0..      | 29s..        | 28s. 29s..    | 1 0 0..       | 0 7 0—               | Jan. 1862   |           |
| 12000 Copper Miners of England..  | 25 0 0..      | 25..         |               | 74 per cent.— | Half-yearly.         |             |           |
| 35000 Ditto ditto (stock) ..  | 100 0 0..     | 24..         |               | 1 per cent.—  | Half-yearly.         |             |           |
| 1055 Craddock Moor (copper), St. Cleer*..                               | 8 0 0..       | 28..         |               | 6 5 0..       | 6 7 0—               | Nov. 1861   |           |
| 867 Cwm Efn (lead), Cardiganshire*..                                    | 7 10 0..      | 20..         |               | 6 18 0..      | 0 10 0—              | Jan. 1862   |           |
| 128 Cwmyntwith (lead), Cardiganshire*..                                 | 60 0 0..      | 200..        |               | 233 10 0..    | 4 0 0—               | Jan. 1862   |           |
| 280 Derwent Mines (all-lead), Durham..                                  | 300 0 0..     | 180..        |               | 142 0 0..     | 5 0—                 | June, 1861  |           |
| 1024 Devon Gt. Con. (cop.), Tavistock* [S.E.]                           | 1 0 0..       | 370..        | 370 375..     | 74 0 0..      | 7 0 0—               | Nov. 1861   |           |
| 358 Dolcoath (copper, tin), Camborne*..                                 | 128 17 6..    | 550..        |               | 645 10 0..    | 8 0 0—               | Dec. 1861   |           |
| 2000 Dyngwyn (lead), Wales..  | 12 6 6..      | 10..         |               | 0 5 0..       | 2 2 6—               | Nov. 1861   |           |
| 512 East Bassett (cop.), Redruth [S.E.]..                               | 23 10 0..     | 521..        | 50 521..      | 93 0 0..      | 3 0 0—               | Nov. 1861   |           |
| 6144 East Caradon (copper), St. Cleer [S.E.]..                          | 2 14 6..      | 304..        | 29 30 30..    | 2 5 0..       | 1 15 0—              | Jan. 1862   |           |
| 350 East Barren (lead), Cardiganshire*..                                | 32 0 0..      | 45..         |               | 79 10 0..     | 1 0 0—               | Dec. 1861   |           |
| 1400 Exram Mining Co. (lead), Derbyshire..                              | 5 0 0..       | —            |               | 20 2 4..      | 0 10 0—              | May, 1861   |           |
| 4910 Fowey Consols (copper), Twardreath*..                              | 4 0 0..       | 5..          |               | 41 9 3..      | 0 2 6—               | June, 1860  |           |
| 2800 Foxdale (id.) [L.]   | 2560 £25 pd.. | 240 £20 pd.) |               | 35..          | —                    | Dec. 1861   |           |
| 5000 Frank Mills (lead), Devon..  | 3 18 6..      | 41..         |               | 0 14 0..      | 0 3 0—               | Sept. 1861  |           |
| 6000 Great South Tolga (S.E.), Redruth..                                | 0 14 6..      | 41..         |               | 17 8 0..      | 0 5 0—               | Dec. 1861   |           |
| 1798 Great Wheal Fortune, Breage..                                      | 18 6 0..      | 13..         | 12 14 13 14.. | 1 0 0..       | 0 10 0—              | Dec. 1861   |           |
| 5908 Great Wh. Vor (tin, cp.), Helston [S.E.]..                         | 40 0 0..      | 7..          | 6 7..         | 1 12 6..      | 0 7 6—               | Sept. 1861  |           |
| 1024 Herodispot (id.), near Liskeard [S.E.]..                           | 3 10 0..      | 39..         |               | 16 5 0..      | 1 15 0—              | Oct. 1861   |           |
| 1000 Hibernal Mine Company..  | 92 6 2..      | 271..        |               | 7 10 0..      | 0 15 0—              | Sept. 1861  |           |
| 160 Levant (copper, tin), St. Just..                                    | 2 10 0..      | 95..         |               | 1001 0 0..    | 5 0 0—               | May, 1860   |           |
| 409 Lisburne (lead), Cardiganshire, Wales*..                            | 18 15 6..     | 10..         | 10 10 10..    | 2 0 0—        | Dec. 1861            |             |           |
| 5000 Marke Valley (copper), Caradon..                                   | 4 10 6..      | 10..         | 10 10 10..    | 0 0 0—        | Jan. 1862            |             |           |
| 5000 Mendip Hills (lead) [L.]   | 10..          | 10..         |               | 2 1 0..       | 0 2 6—               | May, 1860   |           |
| 1850 Minera Mining Co. [L.]   | 1..           | Wrexham 21.. | 0 0..         | 170..         | 78 3 3..             | 3 2 6—      | Nov. 1860 |
| 20000 Mining Co. of Ireland (cop., lead, coal)..                        | 7 0 0..       | 154..        |               | 14 7 11..     | 0 7 0—               | June, 1861  |           |
| 640 Mount Pleasant (tin), Monmouth..                                    | 4 0 0..       | 35..         |               | 16 10 7..     | 1 5 0—               | Dec. 1861   |           |
| 6000 New Birch Tor and Vitter Consols..                                 | 1 6 6..       | 24..         |               | 3 6 6..       | 0 1 0—               | Sept. 1861  |           |
| 6000 North Down (copper) Redruth..                                      | 2 3 4..       | 5..          | 5 5 5..       | 6 7 6..       | 0 5 0—               | Dec. 1861   |           |
| 1368 North Grangler, Redruth..  | 2 7 6..       | 6..          |               | 10 10 0..     | 0 10 0—              | Mar. 1861   |           |
| 6000 North Great Work, Breage..   | 3 3 0..       | 14..         |               | 0 2 0..       | 0 2 0—               | May, 1860   |           |
| 5000 Orsdd (lead), Flintshire..   | 0 0 8..       | 14..         |               | 9 4 0..       | 1 3 0—               | Dec. 1861   |           |
| 6400 Par Consols (cop.), St. Blazey [S.E.]..                            | 1 2 6..       | 73..         |               | 36 9 6..      | 0 5 0—               | Nov. 1861   |           |
| 205 Parys Mines (copper), Anglesey [L.]..                               | 50 0 0..      | —            |               | 12 10 0..     | 2 10 0—              | Sept. 1861  |           |
| 200 Phoenix (copper, tin), Linkinhorne..                                | 100 0 0..     | 435..        |               | 445 10 0..    | 0 5 0—               | May, 1861   |           |
| 1772 Polberro (tin), St. Agnes..  | —..           | 5..          |               | 6 19 6..      | 0 10 0—              | Dec. 1861   |           |
| 1120 Providence (tin, uny. Lelant) [S.E.]..                             | 10 6 7..      | 42..         | 40 42..       | 61 15 0..     | 1 0 0—               | Nov. 1861   |           |
| 16 Rhosemor..   | 50 0 0..      | —            |               | 1250 0 0..    | 0 100 0—             | Quarterly.  |           |
| 512 South Caradon (cop.), St. Cleer* [S.E.]..                           | 1 8 5..       | 315..        | 310 315..     | 361 0 0..     | 5 0 0—               | Nov. 1861   |           |
| 512 South Tolga (cop.), Redruth, Cornwall..                             | 8 0 0..       | 48..         | 48 50..       | 103 10 0..    | 1 0 0—               | Nov. 1861   |           |
| 496 South Wheal Frances, Illogan* [S.E.]..                              | 18 18 9..     | 115..        | 119 117 117.. | 368 5 0..     | 1 0 0—               | Jan. 1862   |           |
| 280 Speare Moor (tin, copper), St. Just..                               | 31 17 9..     | 45..         |               | 9 15 0..      | 1 0 0—               | June, 1861  |           |
| 940 St. Ives Consols (tin), St. Ives..                                  | 0 0 8..       | 28..         |               | 26 27..       | 484 10 0..           | 0 10 0—     | Nov. 1861 |
| 960 Tamar Con. (all-ld.), Bedraston [S.E.]..                            | 4 10 0..      | 34..         | 34 36..       | 5 6 0..       | 0 2 6—               | Jan. 1861   |           |
| 6000 Tincroft (cop., tin), Pool, Illogan [S.E.]..                       | 9 0 0..       | 8..          | 73 8..        | 10 18 6..     | 0 5 0—               | Dec. 1861   |           |
| 572 Trelyan Consols (tin), St. Ives..                                   | 11 10 0..     | 16..         |               | 7 0 0..       | 0 10 0—              | Sept. 1860  |           |
| 200 Trumpet Consols (tin), near Helston..                               | 57 10 0..     | 100..        |               | 53 0..        | 1 0 0—               | Aug. 1861   |           |
| 1024 Wendron Consols (tin), Wendron..                                   | 11 13 10..    | 11..         | 10 14 11..    | 8 15 0..      | 0 1 0—               | Jan. 1861   |           |
| 6000 West Bassett (copper), Illogan [S.E.]..                            | 11 10 0..     | 14..         | 13 13 14..    | 22 0..        | 0 0 0—               | May, 1861   |           |
| 60 West Burton Gull (lead), Yorkshire..                                 | 50 0 0..      | —            |               | 14 10 0..     | 3 0 0—               | June, 1861  |           |
| 1024 West Caradon (cop.), Liskeard [S.E.]..                             | 2 0 0..       | 47 1/2..     | 46 47..       | 99 11 3..     | 1 0 0—               | Nov. 1861   |           |
| 256 West Damsel (copper), Gwenfawr..                                    | 37 0 0..      | 45..         |               | 45 0 0..      | 1 0 0—               | May, 1860   |           |
| 6400 West Fowey Consols (tin and copper)..                              | 7 10 0..      | 34..         |               | 0 14 0..      | 0 2 0—               | May, 1861   |           |
| 400 W. Wh. Seton (cop.), Camborne [S.E.]..                              | 47 15 0..     | 280..        | 275 285..     | 330 0..       | 8 0 0—               | Dec. 1861   |           |
| 512 Wheat Bassett (copper), Illogan* [S.E.]..                           | 5 2 6..       | 88..         | 87 90..       | 576 10 0..    | 2 0 0—               | Dec. 1861   |           |
| 766 Wheat Buller (cop.), Redruth* [S.E.]..                              | 5 0 0..       | 80..         |               | 929 0..       | 2 0 0—               | Dec. 1861   |           |
| 2930 Wh. Clifford Amalgamated (cp.), Gwennap..                          | 30 0 0..      | —            | 29 31..       | 2 0 0..       | 10 0 0—              | Oct. 1861   |           |
| 2000 Wh. Falmouth and Sperris..   | 2 5 0..       | 8..          |               | 10 0 0..      | 0 10 0—              | Feb. 1861   |           |
| 138 Wh. Friendships (copper), Devon..                                   | 50 0 0..      | 90..         |               | 2400 5 0..    | 5 0 0—               | Feb. 1861   |           |
| 812 Wh. Jam (silver-lead), Kest..                                       | 3 10 0..      | 18..         |               | 11 10 0..     | 1 0 0—               | Oct. 1861   |           |
| 1094 Wh. Kinty (tin), Uny. Lelant [S.E.]..                              | 1 7 2..       | 61..         | 51..          | 8 0 0..       | 0 10 0—              | Sept. 1860  |           |
| 4800 Wh. Ludcott (lead), St. Ives..                                     | 10 8 0..      | 25..         | 21 24 24..    | 12 0 0..      | 0 4 0—               | Dec. 1861   |           |
| 896 Wh. Margaret (tin), Uny. Lel. [S.E.]..                              | 9 17 6..      | 41..         | 40 41..       | 70 0..        | 1 0 0—               | Nov. 1861   |           |
| 1000 Wh. Mary (tin), Lelant..   | 36 2 6..      | 440..        |               | 280 5 0..     | 7 0 0—               | June, 1860  |           |
| 1024 Wh. Mary Ann (id.), Menheniot [S.E.]..                             | 8 0 0..       | 17..         | 16 16..       | 54 17 6..     | 0 10 0—              | Dec. 1861   |           |
| 80 Wh. Owles, St. Just, Cornwall..                                      | 70 0 0..      | 300..        |               | 285 10 0..    | 5 0 0—               | Nov. 1861   |           |
| 396 Wh. Owles (tin, copper), Camborne..                                 | 58 10 0..     | 124..        | 125 127 127.. | 155 5 0..     | 1 10 0—              | Dec. 1861   |           |
| 5000 Wicklow (copper), Kilcock..  | 5 0 0..       | 56..         | 56 57..       | 43 16 7..     | 2 0 0—               | Oct. 1861   |           |
| * Dividends paid every two months. † Dividends paid every three months. |               |              |               |               |                      |             |           |

## MINES WITH DIVIDENDS IN ABEYANCE.

|  |           |      |  |          |         |             |
|--|-----------|------|--|----------|---------|-------------|
| 700 Aberdovey (silver-lead), Merioneth..     | 1 10 0..  | 30.. |  | 10 0 0.. | 0 10 0— | Mar. 1859   |
| 512 Alfred Consols (cop.), Phillack [S.E.].. | 3 3 6..   | 36.. |  | 20 3 0.. | 0 2 6—  | April, 1859 |
| 1624 Baleswidden (tin), St. Just..           | 13 1 10.. | 12.. |  | 12 5 0.. | 0 5 0—  | Jan. 1861   |
| 1200 Brightside & Frogmore Grove, Derbysh..  | 3 0 0..   | 31.. |  | 3 0 0..  |         |             |